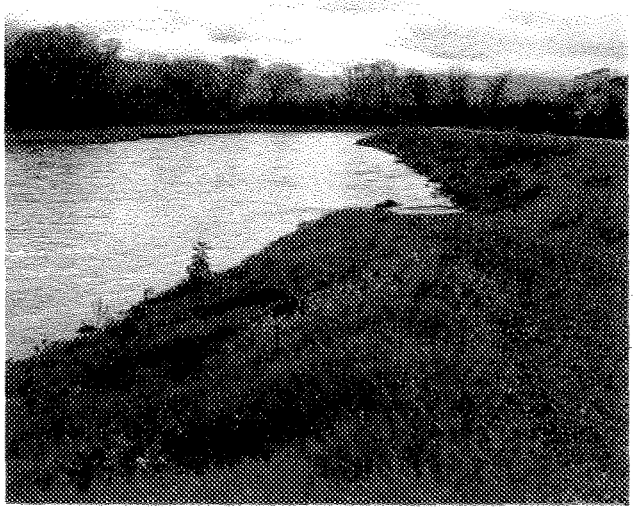
Comprehensive Flood Management Project

Phase I

Report on Development of Baseline Programs & Alternative Funding Mechanisms

McLellan Ave. flooded by Guadalupe River 1995



Completed Lower Coyote Cr. Project Protects North San Jose in 1997

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SANTA CLARA VALLEY WATER DISTRICT

COMPREHENSIVE FLOOD MANAGEMENT PROJECT

PHASE I

REPORT ON DEVELOPMENT OF BASELINE PROGRAMS & ALTERNATIVE FUNDING MECHANISMS

Prepared by
Project Team

Dennis Cheong, Associate Civil Engineer
Dave Drury, Senior Civil Engineer
George Fowler, Senior Project Manager
Bobbi Gee, Project Assistant
Bill Hoeft, Special Programs Engineer
Mala Magill, Public Information Representative
Louisa Mendoza, Engineering Technician
Beth Redmond, Project Coordinator
Randy Talley, Supervising Engineer

SANTA CLARA VALLEY WATER DISTRICT
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5750 ALMADEN EXPRESSWAY
SAN JOSE, CALIFORNIA 95118

Under the direction of

Nai Hsueh, Executive Project Manager

Stanley M. Williams
General Manager

P. Kay Whitlock
Assistant General Manager

MARCH 1998

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Larry Wilson, Vice Chair	**District 4**		

ACKNOWLEDGMENTS

CONTRIBUTORS TO REPORT

Rich Anderson	Assistant Engineer
Mark Baysinger	Assistant Engineer
Tom Bertulis	Assistant Engineer
Sandy Cohn	Assistant Engineer
Charlene Forstner	Senior Accountant
Kent Haake	Engineering Systems Analyst
Jose Ortiz	Supervising Engineer
Matt Price	Senior Engineering Technician
Kris Rickard	Management Analyst
Don Rodriguez	Engineering Technician
Bill Tucker	Drafting Supervisor
Gerard Ward	Engineering Technician
Christine Wood	Accountant

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EXECUTIVE SUMMARY

This report provides an overview of the work performed under Phase I of the Comprehensive Flood Management Project (CFMP). This report also reviews the existing funding sources and other available funding mechanisms for the District's flood management program.

Recognizing it was time to evaluate the needs for the District's flood management program beyond the year 2000, in February 1997 the Board authorized staff to proceed with Phase I of the CFMP. Phase I work included a needs assessment and problem definition, and determination of the "baseline" programs in all five zones. The baseline program for each zone consists of a prioritized expenditures plan, which assumes no new revenue sources after benefit assessments sunset in June 2000.

CURRENT PROGRAM OBJECTIVES

The risk of flood damage can never be completely eliminated; however, it can be reduced by proper floodplain management, ongoing maintenance of facilities, and construction of flood control facilities to carry greater flood flows. Since the 1950s, the District has worked to build and maintain flood control projects and has advised the County and city governments regarding land use planning to minimize flooding problems. These elements of the District's program, including emergency flood response, were reaffirmed by the voters with the approval of the benefit assessment programs in 1982, 1986, and 1990. The objectives of the benefit assessment programs were "to supplement other available but limited revenues in order to keep the existing flood protection system in a safe and effective condition, to respond to emergencies, to perform maintenance and repair, to provide for the completion of other projects still needed, and to provide for general service to the public."

The District's ability to meet these program objectives has varied. Challenges such as shrinking federal and state funding of local projects, increasing regulatory constraints on maintenance and construction activities, greater call for environmental stewardship by the community, and expiration of the benefit assessment program have affected the existing program's ability to meet its objectives and highlight the need to evaluate future objectives.

BASELINE PROGRAM DEVELOPMENT

The following steps were followed in the development of the baseline programs for each flood control zone.

1. Needs Assessment/ Problem Definition
The remaining flood hazard areas were identified and mapped. In addition, areas of high erosion and sedimentation were identified. Historical costs for program activities were used to evaluate future maintenance needs and costs by activity and facility.

2. Review of Program Activities
Staff identified and reviewed with the Flood Control Zone Advisory Committees all ongoing and previous flood management program activities.

3. Historical Program Expenditures
Staff collected and summarized all program activity costs from 1982 through 1996. This expenditures information was grouped by categories of maintenance, emergency services, land use review, operating projects, administrative, capital improvement projects, and debt service.

4. Current Program Cash Flow Projections
Staff developed a cash flow projection through year 2010 for each zone which modeled a continuation of the current program utilizing information developed during the needs assessment. These cash flows illustrate the revenue shortfalls facing all of the zones within the next few years.

5. Level of Service Approach to Baseline Development
In order to prioritize program activities consistent with the District's flood management mission, staff defined different Levels of Service, A thru F, which describe stepped-increases in the level of program services and activities dependent on available revenues. Worksheets were prepared for each zone showing projected operating budgets for each Level of Service in FY 00-01. A comparison of the projected Level of Service operating budgets versus the projected available revenues after June 2000 indicates which Level of Service each zone can support.

6. Proposed Baseline Budget for Fiscal Year 2000-01
Utilizing input received from the Zone Advisory Committees, staff developed a prioritized operating expenditures budget for each of the zones. This operating budget was limited by the projected revenues after June 2000, when benefit assessments sunset.

*7. Baseline Program Cash Flow Projection*s
Baseline Program Cash Flow Projections through year 2010 for each zone were developed which summarize the level of annual operating and capital expenditures that can be supported by projected revenues and capital reserves. Basic assumptions included a reduced level of service for operations and maintenance, as well as a reduced capital improvement program.

BASELINE CAPITAL IMPROVEMENT PROGRAM STRATEGY

In order to continue to provide an acceptable level of service for both the operating and capital programs, a balance of projected expenditures between the two was developed. To accomplish this a set of guiding principles for the baseline capital improvement strategy for all zones was developed. These principles are as follows:

- Issue authorized new debt.
- Complete all phases of projects currently under construction.
- Complete current planning studies.
- Do not undertake new planning or design efforts without identified funding sources.
- Pursue subventions and other State funding opportunities.
- Pursue Federal cost-sharing.

REVIEW OF PROGRAM FUNDING MECHANISMS

The need for this review of funding mechanisms stems from the pending June 2000 sunset of the District's Benefit Assessments revenue generation for flood management facilities. Renewal/replacement of the

assessments is complicated by the 1996 passage of Proposition 218 by California voters. This amendment to the California Constitution profoundly affects the way local government may generate revenue based on property ownership. Since it is a constitutional amendment, it supersedes all conflicting statutory acts. This directly affects the District's method of generating revenue for flood management facility maintenance and capital improvement projects, which was based on the Benefit Assessment Act of 1982. This Act allowed the assessment of property to be derived from a *contribution to burden (runoff)* approach. Each property was assessed, generally speaking, relative to type and extent of development and its generation of runoff. Proposition 218 limits the method of assessment to only those properties which receive a *special benefit*, as distinguished from general benefits to these and additional properties; further, this *special assessment* is limited to the value of the special benefit. **Simply put, the District cannot renew the existing benefit assessments nor establish similar assessments because these funding mechanisms are now at variance with California law.** Alternative funding mechanisms, if needed, must be explored. It is anticipated that the District will be required to continue the existing benefit assessment to finance existing long term obligations. However, the District is not prohibited from seeking to establish another source of revenue for the future flood management program.

Funding mechanisms available to the District and allowable under Proposition 218 can be categorized into major funding mechanisms and supplemental funding mechanisms. Identified major funding mechanisms include special taxes, special assessments, and formation of a storm water conveyance utility which collects service fees. Identified supplemental funding mechanisms include development impact fees, permit fees, and application of all available *ad valorem* property taxes to the flood management program. An alternative approach to funding capital improvement projects is to form partnerships with the county and/or other municipalities, utilizing their more flexible revenue generation authorities.

Of the major funding mechanisms, special taxes are most flexible since these may be used for any purpose. Establishment of a special tax is the only identified funding mechanism which is necessarily linked to consolidation with a general election in the county. Special assessments are the least flexible and most difficult to establish. Formation of a storm water conveyance utility is less difficult than either of these funding mechanisms, but there are restrictions on use of the revenue. With regard to the supplemental funding mechanisms identified here, the imposition of impact fees and permit fees requires adoption of a resolution or ordinance and a public hearing. Application of the property taxes differently than past application requires only Board approval.

PHASE I FINDINGS

This Phase I Report documents the work performed to identify estimated future program costs and revenues and determine a prioritized expenditure plan for each zone, assuming reduced revenues when benefit assessments sunset in year 2000.

A review of the current program cash flow projections and level of service worksheets for each of the zones indicates that after the year 2000-01, annual operating outlays will exceed annual revenues in all five zones. Additionally, in all but the East Zone, proposed capital program expenditures will exceed available reserves, and in three of the zones operating reserves can no longer be maintained at 50% of operating outlays.

After year 2000-01, in all but the South Zone, annual revenues will only support a reduced operating level of service which provides for essential and mandated functions (such as compliance with inter-agency agreements and permit conditions), maintenance of *improved* District facilities, and maintenance of a portion

of the District's *unimproved* facilities. In the South Zone annual revenues will only support the cost requirements of identified essential and mandated functions, and maintenance of a portion of the *improved* facilities.

In addition to the projected operating program shortfalls, a number of major capital improvement projects cannot be funded. A partial list of these projects includes: San Francisquito Creek, Sunnyvale East and West Channels, Upper Guadalupe River, Coyote Creek, Upper Penitencia Creek, and Upper Llagas Creek.

In summary, a review of the Current Program Cash Flow Projections and Level of Service Worksheets for each of the zones indicates that projected revenues are insufficient to maintain the current level of service for operations and maintenance. In addition, a significant number of major capital improvement projects have no identified funding source and cannot be funded locally unless alternative revenue sources are secured.

RECOMMENDATION

The baseline programs have identified prioritized operating and capital improvement programs for each of the zones, which assumes no new revenue sources and reduced levels of service, after June 2000. These baseline programs are recommended to be adopted if additional revenues are not secured prior to that time.

All of the Zone Advisory Committees stated that a reduced level of service for operations and maintenance is unacceptable and some level of capital projects construction needs to continue. The Zone Committees recommend that the District proceed to address the issues identified in this report and develop flood management program alternatives beyond the year 2000 (Phase II), including seeking alternative revenue sources.

Therefore, it is recommended that the Board adopt this Phase I Report and direct staff to commence Phase II of the CFMP. Phase II work will consist of evaluating different program alternatives, development of a preferred program, and identification of a feasible funding strategy to support the preferred program.

Concurrent with the start of Phase II, staff proposes a series of work sessions with the Board to review the information and issues identified in this report and other subjects related to the District's flood management program. The subjects for work sessions include:

- Flood Management Baseline Program with no new revenue source after Benefit Assessment's sunset in June 2000.
- Available funding mechanisms and feasible funding alternatives for the flood management program.
- Changes and increased costs experienced by maintenance program.
- Clarification of District's environmental policy.
- Prioritization of the flood management capital improvement program.
- Various levels of services that could be provided by the District and the impacts of reducing the current level of services to the communities.

CHAPTER 1
BACKGROUND AND DEVELOPMENT OF BASELINE PROGRAMS

OVERVIEW

In addition to the floods of February 1998, other recent trends and events have focused attention on flood management in Santa Clara County and have directly affected the flood control zones' abilities to accomplish their flood management goals. These trends and events include:

- **Shrinking Federal and State Funding**—Federal and state funding to assist local flood control programs is shrinking, forcing local agencies to bear more of future flood control costs. State actions have also shifted local property tax revenues from the District to other areas of government.

  For the past several years the state has failed to meet its obligation by not funding its flood control subventions program (under which it reimburses local sponsors for some project costs) and there is uncertainty whether this program will be funded in the future. The District currently has an outstanding balance of $36 million in subventions claims, with an additional $6 million in claims anticipated to be submitted this fiscal year.

- **Greater Call for Environmental Stewardship**—Local communities and resource agencies are calling for the District to play a more active role as a resource steward by protecting water quality and habitats in local creeks and the San Francisco and Monterey Bays, and expanding the uses and purposes of its flood control projects.

- **Properties Returned to 1 Percent Flood Zone**—Several areas in the County are protected by levees which do not meet new FEMA guidelines. These areas, which previously were not in the 1 percent flood zone, are being remapped into special flood hazard areas. Property owners in these areas will need to obtain flood insurance as a condition of any new federally insured loans.

- **Increasing Regulatory Requirements for Maintenance Activities**—Increasing regulatory oversight and new requirements for routine maintenance activities have resulted in significant increases in ongoing maintenance costs. These costs continue to increase rapidly and threaten to outstrip the zones' funding abilities.

In addition to these challenges at the federal, state, and local levels the current benefit assessment program, which accounts for approximately 50 percent of the total program revenues, will sunset in the year 2000.

Recognizing it was time to evaluate the needs of the District's flood management program beyond the year 2000, the Board authorized staff to proceed with Phase I of the Comprehensive Flood Management Project (CFMP) in February 1997. Phase I work included a needs assessment, problem definition, and determination of the "baseline" programs in all five flood control zones. The baseline program for each zone assumes no new revenue source after benefit assessment sunsets in June 2000 and consists of a prioritized expenditure plan for each of the zones' operating budgets, which balances projected annual outlays against revenues. In addition, a baseline capital improvement strategy was developed which assumes issuance of the remaining available debt in order to fund the highest priority flood damage reduction projects in each zone, without federal or state participation. These baseline programs were developed with input from all of the Flood Control Zone Advisory Committees.

Also completed as part of the Phase I work was a review of the existing funding sources and other available funding mechanisms for the flood management program. The findings of this review are included in this report.

CURRENT PROGRAM BACKGROUND AND OBJECTIVES

The District has divided the County into five flood control zones (see Appendix J)—Northwest, North Central, Central, East, and South—and a 300-square-mile area in the northeast portion of the County with no known flooding problems. The four northernmost flood control zones drain into San Francisco Bay, and the South Zone drains via the Pajaro River into Monterey Bay. The public advisory committees for each zone (Flood Control Zone Advisory Committees) are comprised of representatives from each city in the zone, a representative from the County where the unincorporated area exceeds 25 percent of the area of the zone, and public at-large appointments made by the Board of Directors. The committees meet at least four times a year to provide input to staff and make appropriate recommendations to the Board.

The risk of flood damage can never be completely eliminated; however, it can be reduced by proper floodplain management, ongoing maintenance of facilities, and construction of flood control facilities to carry greater flood flows. Since the 1950s, the District has worked to build and maintain flood control projects and has advised the County and city governments regarding land use planning to minimize flooding problems. These elements of the District's program, including emergency flood response, were reaffirmed by the voters with the approval of the benefit assessment programs in 1982, 1986, and 1990. The objectives of the benefit assessment program were "to supplement other available but limited revenues in order to keep the existing flood protection system in a safe and effective condition, to respond to emergencies, to perform maintenance and repair, to provide for the completion of other projects still needed, and to provide for general service to the public."

The following is a brief description of each of these key program elements:

Floodplain Management (Ordinance Administration)
The objective of this program element is to avoid future flood hazards by encouraging the adoption of floodplain ordinances by local jurisdictions having zoning power. The District reviews and comments on major development proposals and environmental documents to ensure increased runoff to flood facilities is adequately addressed and to encourage sound floodplain management.

A great majority of creek-side property in the County is privately owned. To protect the health and integrity of these waterways and riparian habitats and to ensure they are maintained in a manner that does not slow water flow, the District requires property owners to comply with Ordinance 83-2. This ordinance mandates that property owners obtain a District permit for any activities including grading, excavation, planting, and building within the vicinity of creeks. It prohibits the dumping of any kind of material in or next to a creek, and requires property owners to maintain creeks free from obstructions to water flow.

Maintenance of Facilities
The District's maintenance activities keep flood control facilities operating at their maximum potential. Maintenance staff routinely clear waterways of sediments, fallen trees and debris, and perform repairs or stabilize embankments. They may also remove vegetation depending on the environmental effects, the potential fire hazard, the difficulty of the operation, and the effect the vegetation has on a channel's flood-carrying capacity. Activities also include maintenance and monitoring of revegetation projects once

they are established. Except in special emergencies, the District only maintains those sections of creeks for which it has established right-of-way.

Construction of Flood Control Facilities
For each flood problem at the watershed or sub-watershed level, the District works to develop solutions to flood problems that have minimal environmental impacts and that satisfies the local community and regulatory agencies. The District uses a wide variety of corrective flood control measures, including nonstructural flood-proofing, levees, earth channels, bypass culverts and channels, modified floodplains, floodwalls, rock or gabion channels, and concrete channels.

Flood protection projects are constructed after a lengthy review process that includes environmental impact reports and public hearings, which offer a forum for information exchange directly with those who will be affected by the project. The District works with local communities to find flood control solutions that reflect community consensus.

The District strives to minimize the impacts of its flood control projects on the natural environment. Where it is impossible to avoid major impacts, projects include a mitigation program to reestablish riparian habitats or otherwise offset a project's adverse environmental effects. To date, the District has created 180 acres of new wetlands and riparian forest, and at least 60 more acres will be established in the next few years. These projects provide habitat for wildlife and improve the appearance of newly constructed channels. Fish ladders and other structures are installed, where appropriate, to allow passage of migrating fish.

Emergency and Post-Flood Response
The District maintains a flood emergency "alert" during the rainy months of October through April and closely monitors streamflows, reservoir conditions, and weather conditions. If an emergency threatens, the District's emergency operations center promptly relays information to the appropriate cities, the County, and to the news media. The District does not issue flood warnings directly to property owners, but relies on the emergency personnel of the community to make decisions such as evacuations.

During flood emergencies, District crews clear debris and blockages from creeks, channels, and culvert entrances; place sandbags where floodwaters threaten to overtop creek banks; and provide sandbags to the public. This program element provides for post-flood rehabilitation of flood control facilities damaged in a storm disaster in order to return the flood control system to the state of pre-flood readiness. The District also operates its water conservation reservoirs in such a manner as to maximize the incidental flood storage benefits each provides.

PROGRESS IN MEETING PROGRAM OBJECTIVES

The objectives of the flood management program since the first voter-approved benefit assessment in 1982 have been met with varying degrees of success. The following is a brief discussion of the progress of each of the major elements of the program.

Floodplain Management (Ordinance Administration)
The District's floodplain management activities have been successful in preventing future flood damage to new development by encouraging floodsafe construction. The District continues to meet its obligation in the implementation of its ordinance by reviewing land development proposals and issuing permits for all development and activities in or near creeks. The District also continues to advise other jurisdictions as to

the severity of flood and erosion hazards, to propose flood protection alternatives for developer implementation, and identify of right-of-way needs for future flood damage reduction projects.

Maintenance of Facilities

The District operations and maintenance activities were quite successful in maintaining facilities during the 1980s and 1990s. Over the past few years regulatory constraints have delayed and in many cases altered the way maintenance activities are performed, often resulting in significant cost increases. Despite these challenges, District facilities have continued to be maintained at the design level of service.

Construction of Flood Control Facilities

Construction of flood damage reduction projects since the early 1980s has been the core goal of the flood management program. At the time the 1986 and 1990 benefit assessment programs were adopted, the goal was to reduce potential flood damages approximately 80% by the year 2000. A reduction in flood damages of only 35%-40% has been achived to date, although completion of the downtown Guadalupe River Project would result in a 55%-60% reduction by the year 2000. Some of the primary factors which have contributed to the delay in planned capital improvement projects have been 1) planned partnerships with federal and state agencies to construct key flood control projects have been reduced, delayed, or suspended (i.e., state subventions), 2) lower than projected property tax revenues due to an economic downturn in the late 1980s, 3) increased costs for land acquisition and project construction, 4) changing community needs and values which call for increased public input during project planning, and 5) increasingly restrictive environmental regulations.

Emergency and Post-Flood Response

The District's emergency preparedness and response activities have been increasingly successful, continuing to improve and expand each year with public outreach and sandbag assistance programs. The District's storm watch program continues to improve advance warning capability and capacity to inform and advise public agencies and citizens of Santa Clara County. The District utilizes multiple forms of media to accomplish this objective, including newspapers, radio, an internet web site, and closer coordination with other agencies during storm events.

District crews have responded to emergency situations clearing debris and blockages from creeks, channels, and culvert entrances; placing sandbags where floodwaters threatened to overtop creek banks; providing sandbags to the public; and repairing damage to major flood control facilities. The severe storms of 1982, 1983, and 1986 required diversion of about $8 million from the construction program for storm damage repairs.

The District has also continued to evaluate and manage its water conservation reservoirs to maximize the flood storage benefits they provide preceding and after major storm events.

BASELINE PLAN DEVELOPMENT PROCESS

The following steps were followed in the development of the baseline programs for each flood control zone. This information was provided to and discussed with the Zone Advisory Committees between September 1997 and February 1998.

1. Needs Assessment/ Problem Definition
The remaining flood hazard areas were identified and mapped. Utilizing the District's GIS, information from FEMA's Flood Insurance Rate Maps was transferred onto the County base map. The base map was also updated to reflect proposed, ongoing, or completed map revisions not reflected in the current FEMA maps.

In addition to identification of the remaining flood hazard areas, information generated as part of the Maintenance EIR was utilized to identify areas of high erosion potential and sedimentation. Historical costs for these activities were used to evaluate future maintenance needs and costs by activity and facility.

2. Review of Program Activities
Staff identified and reviewed with the Zone Advisory Committees all ongoing and previous flood management program activities. This information is provided in Appendix A. Also identified and summarized by zone and by city were all Joint-Use Agreements (Appendix D), all Cost-Sharing Agreements (Appendix E), and a listing of Adopt-a-Creek Participants (Appendix F).

3. Historical Program Expenditures
Staff collected and summarized all program activity costs from 1982 through 1996. This expenditure information was grouped by categories of maintenance, emergency services, land use review, operating projects, administrative, capital improvement projects, and debt service.

4. Current Program Cash Flow Projection
Staff developed a cash flow projection through year 2010 for each zone which modeled a continuation of the current program utilizing information developed during the needs assessment. Basic assumptions included continuing the current level of service for operations and maintenance (reflecting the significant cost increases for maintenance activities and mitigation), reduced revenues after 2000 due to the sunset of benefit assessment, and continuing with the capital improvement program as reflected in the draft 1998-99 CIP. These cash flows illustrate the revenue shortfalls facing all of the zones within the next few years.

5. Level of Service Approach to Baseline Development
In order to prioritize program activities consistent with the District's flood management mission, staff defined different Levels of Service, A thru F, which describe stepped-increases in the level of program services and activities dependent on available revenues. As an example, Level of Service F represents program expenditures for only mandated and essential services (such as agreements with the U.S. Army Corps of Engineers or court orders). Level of Service E would include maintenance of *improved* District facilities, in addition to all services provided in Level of Service F. Levels of Service A-F are shown in Appendix B.

Worksheets were prepared for each zone (Chapters 2-6) showing projected operating budgets for each Level of Service in FY 00-01. A comparison of the projected Level of Service operating budgets versus the projected available revenues after June 2000 indicates which operating Level of Service each zone can support.

6. Proposed Baseline Budget for Fiscal Year 2000-01
Utilizing input received from the Zone Advisory Committees, staff developed a prioritized operating expenditures budget for each of the zones. This annual operating budget was limited by the projected revenues after June 2000, when benefit assessments sunset. The proposed baseline operating budgets for each zone are shown on the Level of Service Worksheets (Chapters 2-6).

7. Baseline Program Cash Flow Projection
Baseline Program Cash Flows through year 2010 for each zone were developed which summarize the level of annual operating and capital expenditures that can be supported by projected revenues, available debt, and capital reserves. Basic assumptions included a reduced level of service for operations and maintenance, as well as a reduced capital improvement program which is described in more detail in the next section.

BASELINE CAPITAL IMPROVEMENT PROGRAM STRATEGY

Development of the baseline programs for each of the zones focused on the annual operations and maintenance needs and available funding to support those needs. As shown in the Current Program Cash Flows for all zones, operating costs will surpass projected revenues within a few years, requiring a reduction in operating program services and precluding funding for many planned major capital improvements. A baseline capital improvement strategy was developed which laid out some general principles for all the zones and a specific plan for each zone. Input on these plans was solicited from each of the Zone Advisory Committees. The guiding principles are as follows:

- ***Issue authorized new debt***—In June 1995, all but the South Zone executed an Installment Purchase Agreement with the SCVWD Public Facilities Financing Corporation for the construction of up to $68 million in new flood control facilities. The agreement provides for additional debt as allowed under the current benefit assessment authorization. The additional debt can be executed up until the year 2000; if issuance takes place in year 2000, thirty-year instruments would be retired in 2030. Benefit Assessments to meet existing plus supplemental debt service would approximately equal current rates after the benefit assessment sunset.

  Issuance of the remaining $68 million in authorized debt would increase the amount of indebtedness for flood control facilities from approximately $120 million to $190 million and require the benefit assessment rates to continue at approximately current levels, in all but the South Zone, until the debt for the new construction is repaid in year 2030.

- ***Complete all phases of projects currently under construction***—It is recommended that all projects currently under construction be completed. This includes phases of larger projects necessary to provide the flood protection benefits originally planned. Construction of new projects should not be started without an identified funding source.

- ***Complete current planning studies***—It is recommended that planning studies currently underway be continued or completed.

- ***Do not undertake new planning or design efforts without identified funding sources***—It is recommended that no new planning or design projects should be commenced without an identified funding source.

- ***Pursue subventions and other State funding opportunities***—Although the baseline program cash flows assume no state subventions reimbursements, it is recommended that the District continue to actively pursue State subventions funding in order to recover outstanding claims and to provide for future reimbursement opportunities. Currently the District has a balance of approximately $42 million in outstanding subventions claims filed or in the process of being filed, and an additional $32

million in potential future claims. These claims are for federal projects in the Central, East, and South Zones.

Additionally, the District should investigate pursuing other State funding such as state-wide bonds and special legislation for local projects.

- ***Pursue Federal cost-sharing***—It is recommended that the District continue to leverage local dollars by pursuing federally cost-shared projects, although the cash flow projections assume projects will continue to be funded locally.

MAINTENANCE COST PROJECTIONS

A review of historical program expenditures shows maintenance activities to be the most significant costs within each zone. Three major activities account for the majority of costs: sediment removal, erosion repair, and vegetation and weed abatement. Maintenance costs continue to increase rapidly and threaten to outstrip the zones' funding abilities. Cost increases can be attributed largely to new or more stringent regulatory requirements such as sediment testing, water quality testing, use of coffer dams, and maintaining live streamflows during the course of routine work. Additionally, the costs to dispose of sediments and debris at landfills has increased dramatically over the past decade.

These new requirements were made part of the sediment removal work the District performed in 1997. In addition, the wetland habitat impacts were required to be mitigated. Appendix C summarizes the costs expended to accomplish the 1997 Urgent Sediment Removal Work at nine separate sites, including mitigation costs, and compares those costs to the cost of work performed at the same sites in previous years.

For baseline program development and future budget projections, staff used a 200% increase in sediment removal, erosion repair, and vegetation removal costs after year 2000 (this equates to 3 times the FY 97-98 budget for each of these major maintenance activities). For planning purposes the costs to mitigate for the impacts of routine maintenance work for the 10-year maintenance program are estimated to be in excess of $50 million over 10-years. These estimates are for mitigation design, construction, land acquisition, maintenance, and monitoring.

A breakdown of the estimated compensatory mitigation costs for the 10-year maintenance program is also included in Appendix C.

ALTERNATIVE FUNDING MECHANISMS

Chapter 7 describes in summary fashion those funding mechanisms available to the District which are viable methods for generation of revenue to implement flood management program activities.

CHAPTER 2
NORTHWEST FLOOD CONTROL ZONE

This chapter provides background information developed for the Northwest Zone and reviewed with the Zone Advisory Committee to create a baseline program. The following information is provided in this chapter:

- Zone Map showing the Remaining One Percent Flood Area (Figure 2-1)
- Partial List of Remaining Capital Projects (Table 2-1)
- Historical Program Expenditures Summary Sheet (Table 2-2)
- Current Program Cash Flow Projection (Table 2-3)
- Level of Service Worksheet and Proposed Year 2000 Budget (Table 2-4)
- Baseline Program Cash Flow Projection (Table 2-5)

This zone includes the cities of Palo Alto, Los Altos, Los Altos Hills, Mountain View, and portions of Cupertino and Sunnyvale. It covers the tributaries and watersheds of San Francisquito Creek, Matadero Creek, Barron Creek, Adobe Creek, Stevens Creek, and Permanente Creek. Figure 2-1 shows a map of the zone and indicates the areas currently subject to flooding from a 1 percent flood.

Since 1982, portions of Barron, Adobe, Matadero and Stevens Creeks have been constructed and this flood map reflects the work completed to date. Table 2-1 lists the remaining capital projects which will address the remaining flood hazard in the zone, including the threat of tidal flooding.

The Historical Program Expenditures Sheet summarizes all of the actual program costs from 1981 through 1996. Also included were the budgeted expenditures for FY 96-97 and 97-98. This information was reviewed with the Committee to provide background and reference for development of the baseline program after year 2000.

Current Program Cash Flow

This cash flow represents a continuation of the current program through the year 2010. It assumes reduced revenues due to the benefit assessment sunset, maintaining the current level of service for operations and maintenance (including mitigation costs), and a continuation of the current capital improvement program. A review of the cash flow indicates the zone will not be able to maintain adequate operating reserves as early as FY 00-01 if the current program expenditures continue. Additionally, insufficient revenues exist starting in FY 00-01 to cover projected annual operating outlays. The zone's remaining debt capacity of $30 million was not utilized in this cash flow.

Baseline Program Level of Service

The Level of Service Worksheet provides a basis for determining the baseline program. A review of the worksheet indicates that the projected annual revenue of $4.0 million (less debt service) after year 2000 will only support a program between Level of Service D and E. With this level of service only District-owned improved facilities and a portion of the unimproved facilities are maintained at the current level.

Baseline Program Cash Flow

The Baseline Program Cash Flow lays out a fundable operating program and capital construction program which utilizes the $30 million remaining debt capacity. This cash flow assumes a reduced level of service for operations and maintenance and is consistent with the Baseline Capital Improvement Strategy described in detail below.

Baseline Capital Improvement Strategy

Consistent with the Guiding Principles described in Chapter I it is recommended that the Northwest Zone issue the authorized $30 million debt in order to fund the remaining highest priority capital projects. First priority should be given to the Matadero Creek remediation work, followed by the Upper Adobe and Permanente Creeks Projects. Additionally, it is recommended that the zone's reserves be maintained to bridge the projected gap between operating costs and revenues until after 2000 when a clearer picture of future operating costs emerges. This is consistent with the Zone Advisory Committee's recommendations, although the Committee expressed some concern regarding the ability to fund all three of these projects within the projected funding constraints and desires to consider less than 100-year protection for some of the remaining capital projects in order to maximize the damage reduction benefits over a wider area within the zone.

In summary the strategy is to:

- Issue authorized $30 million new debt.
- Plan and construct remaining highest priority capital projects.
  - Matadero Creek Remediation
  - Permanente Creek
  - Upper Adobe Creek
- Maintain reserves to bridge projected gap between operating costs and revenues after 2000 until clearer picture of operating costs emerges.

Northwest Zone
1% Flood Limits

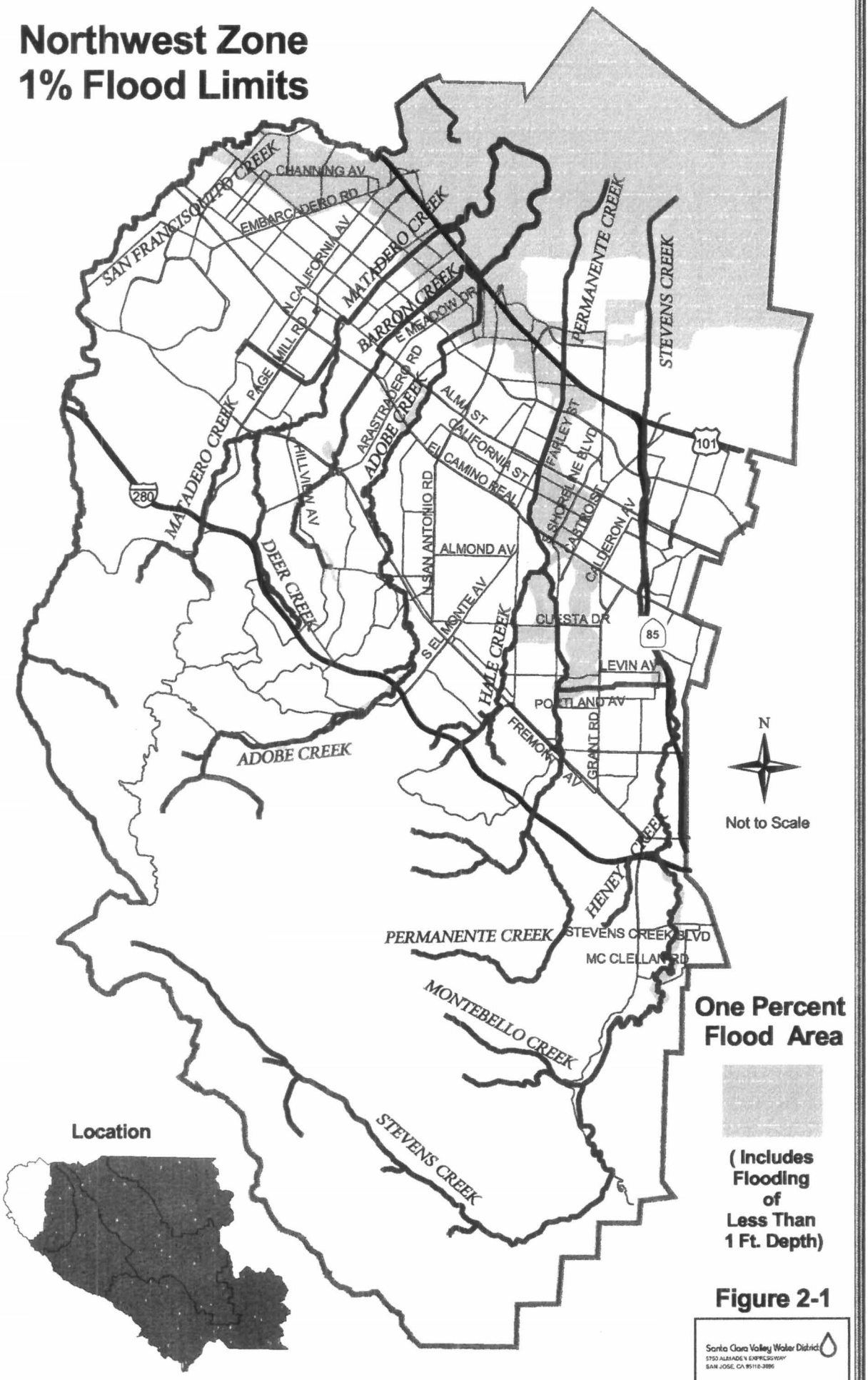

Figure 2-1

TABLE 2-1

FUNDED PROJECTS IDENTIFIED IN THE DRAFT 1998-99 CIP
($ Millions)

Matadero Creek		$ 16.3
Adobe Creek (Upper)		$ 13.1
Permanente Creek		$ 28.0
San Francisquito Creek (Erosion Repair)		$ 1.4
	TOTAL	**$ 58.8**

UNFUNDED PROJECTS
($ Millions)

San Francisquito Creek		$ 68.0
Hale Creek		$ 3.5
Bayfront Levees		$ 5.1
	TOTAL	**$ 76.6**

*** THIS IS A PARTIAL LIST OF REMAINING PROJECTS**

NORTHWEST FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 2-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
I. DEBT SERVICE	$ -	$ 2,821	$ 7,841	$ 1,559	$ 1,558
II. MAINTENANCE					
1) Sediment and Silt Removal	$ 1,091	$ 114	$ 542	$ -	$ -
2) Erosion Prevention and Repair	$ 1,187	$ 952	$ 316	$ -	$ -
3) Vegetation and Weed Abatement	$ 778	$ 704	$ 1,225	$ -	$ -
4) Property and Appurtenances Maintenance	$ 400	$ 107	$ 347	$ -	$ -
5) Trash and Debris Removal	$ -	$ 29	$ 152	$ -	$ -
6) Graffiti Removal	$ -	$ 5	$ 37	$ -	$ -
7) Fencing and Signage	$ -	$ 103	$ 132	$ -	$ -
8) General Maint./Engineering/Administrative Staffing	$ 487	$ 568	$ 548	$ 1,198	$ 978
9) Levee Maintenance	$ 12	$ -	$ -	$ -	$ -
10) Maintenance Warehouse	$ -	$ -	$ 260	$ 163	$ 240
11) Hazmat Investigation, Removal and Disposal	$ 2	$ 1	$ 30	$ 39	$ 42
Subtotal	**$ 3,957**	**$ 2,583**	**$ 3,589**	**$ 1,400**	**$ 1,260**
III. EMERGENCY SERVICES					
1) Flood Awareness Program	$ -	$ -	$ 2	$ 52	$ 63
2) Emergency Operation Center	$ 185	$ 716	$ 293	$ 56	$ 45
3) Sandbag Work	$ -	$ 2	$ 19	$ -	$ 40
Subtotal	**$ 185**	**$ 718**	**$ 314**	**$ 108**	**$ 148**
IV. LAND USE REVIEW	**$ 440**	**$ 545**	**$ 1,244**	**$ 375**	**$ 437**
V. OPERATING PROJECTS					
1) Flood Insurance Liaison Study	$ -	$ -	$ 64	$ 7	$ 27
2) Waterways Management Planning Study	$ 129	$ 112	$ 124	$ 282	$ -
3) Automated Mapping/GIS	$ -	$ -	$ 69	$ 32	$ 46
4) Watershed Management Coordination Project	$ -	$ -	$ 11	$ 40	$ 17
5) San Francisco Bay Shoreline Study	$ 1	$ 5	$ 8	$ -	$ -
6) Nonpoint Source	$ -	$ -	$ 855	$ 118	$ 134
7) Environmental	$ -	$ 2	$ 99	$ 84	$ 249
a. Fisheries Management Plan	$ -	$ -	$ -	$ -	$ -
b. Stream Resource Inventory	$ -	$ -	$ 7	$ 40	$ 74
c. Water Quality Study	$ -	$ -	$ 37	$ -	$ -
d. Fish Passage	$ -	$ -	$ 36	$ -	$ 37
e. Regulatory Agency Permit Coordination	$ -	$ 2	$ 19	$ 39	$ 23
f. Red-Legged Frog Habitat Plan	$ -	$ -	$ -	$ 5	$ 40
g. Environmental Strategy	$ -	$ -	$ -	$ -	$ 75
8) Sedimentation Study	$ 3	$ -	$ -	$ -	$ -
9) Solid Waste Management Study	$ -	$ 2	$ 8	$ -	$ 32
10) Maintenance Guidelines	$ -	$ 2	$ 51	$ -	$ 28
11) Maintenance Program EIR	$ -	$ -	$ 99	$ 60	$ 128
12) Environmental Policy Development	$ -	$ -	$ -	$ 53	$ -
13) Comprehensive Flood Management Project	$ -	$ -	$ -	$ -	$ 130
14) Water Resource Integration/Coordination	$ -	$ -	$ -	$ 29	$ 13
15) Regional Board Watershed Initiative	$ -	$ -	$ -	$ -	$ 36
16) Stream Water Use Communication	$ -	$ -	$ -	$ -	$ 30
Subtotal	**$ 133**	**$ 123**	**$ 1,388**	**$ 705**	**$ 870**

NORTHWEST FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 2-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
VI. ADMINISTRATIVE					
1) Administrative	$ 291	$ 1,319	$ 1,442	$ 286	$ 165
a. Risk Management	$ 142	$ 807	$ 849	$ 181	$ 161
b. Auditing	$ -	$ 7	$ 27	$ 3	$ 4
c. Cost Center Support Project	$ 149	$ 505	$ 566	$ 102	$ -
2) Benefit Assessment Management	$ 19	$ 96	$ 186	$ 172	$ 131
3) Engineering Support	$ 78	$ 164	$ 555	$ 243	$ 263
a. Basic Engineering	$ 78	$ 164	$ 72	$ 8	$ 32
b. Hydrologic Data Management	$ -	$ -	$ 469	$ 227	$ 223
c. Cross Valley Level and Benchmark	$ -	$ -	$ 14	$ 8	$ 8
Subtotal	**$ 388**	**$ 1,579**	**$ 2,183**	**$ 701**	**$ 559**
VII. CAPITAL IMPROVEMENT PROJECTS					
1) Adobe Creek	$ 638	$ 11,744	$ 8,079	$ 469	$ 1,666
2) Matadero Creek	$ 236	$ 9,726	$ 19,655	$ 508	$ 148
3) Permanente Creek	$ 146	$ 117	$ 854	$ 123	$ 475
4) Permanente Diversion	$ 1,507	$ -	$ -	$ -	$ -
5) Stevens Creek	$ 6,658	$ 626	$ 37	$ 23	$ 17
6) Palo Alto Flood Basin	$ 556	$ 785	$ -	$ -	$ -
7) Barron Creek	$ -	$ 5,039	$ -	$ -	$ -
8) San Francisquito Creek	$ 47	$ -	$ 92	$ 124	$ 20
Subtotal	**$ 9,788**	**$ 28,037**	**$ 28,717**	**$ 1,247**	**$ 2,326**
TOTAL	**$ 14,891**	**$ 36,406**	**$ 45,276**	**$ 6,095**	**$ 7,158**

Northwest Zone Cash Flow Projection
Current Program Through 2010
($ Thousands)

	Budgeted	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected	Projected
	97/98	98/99	99/00	00/01	01/02	02/03	03/04	04/05	05/06	06/07	07/08	08/09	09/10
Beginning Reserve Balance	**11,618**	**13,294**	**10,728**	**4,838**	**1,954**	**(1,152)**	**(4,430)**	**(7,774)**	**(11,185)**	**(14,665)**	**(18,214)**	**(21,835)**	**(25,099)**
Revenue Sources													
Property Tax	2,740	2,795	2,851	2,908	2,966	3,025	3,086	3,147	3,210	3,275	3,340	3,407	3,475
Benefit Assessment (Exist. Debt.)	5,280	5,386	5,493	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947
Interest	860	956	820	400	243	137	138	140	142	144	145	147	149
TOTAL	**8,880**	**9,137**	**9,164**	**5,255**	**5,156**	**5,109**	**5,172**	**5,235**	**5,300**	**5,366**	**5,433**	**5,502**	**5,572**
Operating Outlays													
Debt Service (Exist. Debt)	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558
Maintenance	1,260	2,178	3,097	4,015	4,095	4,177	4,261	4,346	4,433	4,522	4,612	4,704	4,798
Mitigation for Maintenance Activities		429	429	429	429	429	429	429	429	429	429		
All Other Operations Costs	2,014	2,054	2,095	2,137	2,180	2,224	2,268	2,313	2,360	2,407	2,455	2,504	2,554
TOTAL	**4,832**	**6,219**	**7,179**	**8,139**	**8,262**	**8,387**	**8,515**	**8,646**	**8,779**	**8,915**	**9,054**	**8,766**	**8,911**
Balance Available for Capital & Reserves	**15,665**	**16,211**	**12,713**	**1,954**	**(1,152)**	**(4,430)**	**(7,774)**	**(11,185)**	**(14,665)**	**(18,214)**	**(21,835)**	**(25,099)**	**(28,438)**
Capital Appropriations													
Automated Mapping/GIS	46	46	-	-									
Adobe Creek	1,666	2,131	497	3,723	381	1,380	248	2,860	172	-	-	-	-
Matadero Creek	148	1,784	5,088	4,838	477	383	2,494	1,097	34	35			
Permanente Creek	475	1,425	2,290	983	1,459	5,087	5,189	5,293	5,399	-			
San Francisquito Gabion Bank	-	-	-		505	938	-	-	-	-			
Stevens Creek - Fish Ladder Mod.	37	97	-		-	-	-	-					
(Shaded area represents un-funded CIP) **TOTAL**	**2,372**	**5,483**	**7,875**	**9,544**	**2,822**	**7,788**	**7,932**	**9,250**	**5,606**	**35**			
Balance Available after CIP	**13,294**	**10,728**	**4,838**	**1,954**	**(1,152)**	**(4,430)**	**(7,774)**	**(11,185)**	**(14,665)**	**(18,214)**	**(21,835)**	**(25,099)**	**(28,438)**
Required Operating Reserves (50% of operating outlays)	2,416	3,110	3,589	4,069	4,131	4,194	4,258	4,323	4,390	4,458	4,527	4,383	4,455
Available Operating Reserves	2,416	3,110	3,589	1,954	-	-	-	-	-	-	-	-	-
Capital Reserves	10,878	7,619	1,249	-	-	-	-	-	-	-	-	-	-
TOTAL RESERVES	**13,294**	**10,728**	**4,838**	**1,954**	**(1,152)**	**(4,430)**	**(7,774)**	**(11,185)**	**(14,665)**	**(18,214)**	**(21,835)**	**(25,099)**	**(28,438)**

Available Debt Capacity 30,000

Current Program Assumptions

1) Continue to provide current level of service for operations and maintenance. Maintenance and mitigation cost projections based on Administrative Draft Maintenance EIR and regulatory agencies' requirements for routine work.
2) 1997-98 beginning reserve balance from the FY 1996-97 audited financial statement.
3) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year.
4) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
5) Non-maintenance operating costs will increase at 2% per year.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.

Table 2-3

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- Northwest Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
MANDATED FUNCTIONS								
1) Creek Maintenance per Agreement w/ other agencies including maintenance of revegetation sites per permit requirements and activities required per court order/litigation.		$ -	$ -	$ -	$ -	$ -	$ -	
MAINTENANCE								
1) Channel Maintenance			$ 1,741	$ 3,777	$ 4,206	$ 4,206	$ 4,206	$ 2,715
a. Sediment and Silt Removal	$ -		*$ 851*	*$ 945*	*$ 945*	*$ 945*	*$ 945*	
b. Erosion Prevention and Repair	$ -		*$ 182*	*$ 1,821*	*$ 1,821*	*$ 1,821*	*$ 1,821*	
c. Vegetation and Weed Abatement	$ -		*$ 708*	*$ 1,011*	*$ 1,011*	*$ 1,011*	*$ 1,011*	
d. Mitigation for Channel Maintenance Activities	$ -		*$ 197*	*$ 429*	*$ 429*	*$ 429*	*$ 429*	
2) Property and Appurtenances Maintenance	$ -		$ 45	$ 60	$ 75	$ 90	$ 105	$ 45
3) Trash and Debris Removal	$ -		$ 18	$ 24	$ 30	$ 36	$ 42	$ 24
4) Graffiti Removal	$ -		$ 4	$ 6	$ 8	$ 10	$ 12	$ 4
5) Fencing and Signage	$ -		$ 15	$ 20	$ 25	$ 30	$ 35	$ 15
6) General Maintenance/Engineering/Administrative Staffing	$ 978	$ 40	$ 60	$ 80	$ 100	$ 120	$ 140	$ 60
7) Maintenance Warehouse	$ 240		$ 144	$ 192	$ 240	$ 288	$ 336	$ 144
8) Hazmat Investigation, Removal, and Disposal	$ 42		$ 26	$ 34	$ 42	$ 50	$ 58	$ 26
Subtotal	**$ 1,260**	**$ 40**	**$ 2,053**	**$ 4,193**	**$ 4,726**	**$ 4,830**	**$ 4,934**	**$ 3,033**
EMERGENCY SERVICES								
1) Flood Awareness Program	$ 63		$ 34	$ 50	$ 63	$ 76	$ 88	$ 50
2) Emergency Operation Center	$ 45		$ 27	$ 36	$ 45	$ 54	$ 63	$ 36
3) Sandbag Work	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	$ 32
Subtotal	**$ 148**	**$ -**	**$ 85**	**$ 118**	**$ 148**	**$ 178**	**$ 207**	**$ 118**
LAND USE REVIEW	**$ 437**		**$ 264**	**$ 352**	**$ 440**	**$ 528**	**$ 616**	**$ 352**

Table 2-4

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- Northwest Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
OPERATING PROJECTS								
1) Flood Insurance Liaison Study	$ 27			$ 22	$ 27	$ 32	$ 37	$ 22
2) Waterways Management Planning Study	$ -				$ 100	$ 120	$ 140	
3) Automated Mapping/GIS	$ 46					$ 50	$ 60	
4) Watershed Management Coordination Project	$ 17						$ 20	
5) San Francisco Bay Shoreline Study	$ -							
6) Nonpoint Source	$ 134						$ 135	
7) Environmental								
a. Fisheries Management Plan	$ -							
b. Stream Resource Inventory	$ 74						$ 75	
c. Water Quality	$ -							
d. Fish Passage	$ 37							
e. Regulatory Agency Permit Coordination	$ 23		$ 15	$ 20	$ 25	$ 30	$ 35	$ 20
f. Red Legged Frog Habitat Plan/ ESA	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	$ 32
g. Environmental Strategy	$ 75						$ 75	
8) Sedimentation Study	$ -							
9) Solid Waste Management Study	$ 32				$ 35	$ 35	$ 35	$ 35
10) Maintenance Guidelines	$ 28							
11) Maintenance Program EIR	$ 128		$ 130	$ 130	$ 130	$ 130	$ 130	$ 100
12) Environmental Policy Development	$ -							
13) Comprehensive Flood Management Project	$ 130							
14) Water Resource Integration/Coordination	$ 13						$ 15	
15) Regional Board Watershed Initiative	$ 36						$ 40	
16) Stream Water Use Communication	$ 30						$ 30	
Subtotal	**$ 870**	**$ -**	**$ 169**	**$ 204**	**$ 357**	**$ 445**	**$ 883**	**$ 209**
ADMINISTRATIVE								
1) Administrative	$ 165	$ 66	$ 99	$ 132	$ 165	$ 198	$ 231	$ 99
2) Benefit Assessment Management	$ 131		$ 78	$ 104	$ 130	$ 156	$ 182	$ 78
3) Engineering Support	$ 263	$ 104	$ 156	$ 208	$ 260	$ 312	$ 364	$ 156
Subtotal	**$ 559**	**$ 170**	**$ 333**	**$ 444**	**$ 555**	**$ 666**	**$ 777**	**$ 333**
TOTAL	**$ 3,274**	**$ 210**	**$ 2,904**	**$ 5,311**	**$ 6,226**	**$ 6,647**	**$ 7,417**	**$ 4,045**

PROJECTED ANNUAL REVENUE AFTER YEAR 2000 [1] **$ 4,045**

1. Revenue projection assumes: Issuance of maximum available debt by FY 2000, Property tax will increase at 2% per year, Benefit Assessment will decrease to 1.25 times debt service, Annual interest revenue is calculated at 5.5% for 6 months (excludes interest on capital reserves), Debt service has been deducted to show available annual revenue.

2/23/98

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(Nwest)

Table 2-4

Northwest Zone Cash Flow Projection
Baseline Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**11,618**	**13,294**	**11,859**	**37,863**	**30,401**	**24,241**	**12,655**	**5,354**	**1,604**	**1,375**	**1,281**	**1,194**	**1,078**
Revenue Sources													
Property Tax	2,740	2,795	2,851	2,908	2,966	3,025	3,086	3,147	3,210	3,275	3,340	3,407	3,475
Benefit Assessment (Exist. Debt.)	5,280	5,386	5,493	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947	1,947
Benefit Assessment (New Debt.)				2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698	2,698
Interest	860	956	882	2,290	1,881	1,544	909	509	304	293	290	287	283
TOTAL	**8,880**	**9,137**	**9,226**	**9,843**	**9,493**	**9,215**	**8,640**	**8,302**	**8,160**	**8,213**	**8,276**	**8,339**	**8,403**
Operating Outlays													
Debt Service (Exist. Debt)	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558	1,558
Debt Service (For New COP)				2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158	2,158
Maintenance (Incl. mitigation for maint.)	1,260	1,851	2,442	3,033	3,094	3,156	3,219	3,283	3,349	3,416	3,484	3,554	3,625
All Other Operations Costs	2,014	1,680	1,346	1,012	1,032	1,053	1,074	1,095	1,117	1,140	1,162	1,186	1,209
TOTAL	**4,832**	**5,089**	**5,346**	**7,761**	**7,842**	**7,925**	**8,009**	**8,095**	**8,182**	**8,272**	**8,363**	**8,456**	**8,551**
Balance Available for Capital & Reserves	**15,665**	**17,341**	**15,738**	**39,945**	**32,051**	**25,531**	**13,286**	**5,561**	**1,581**	**1,316**	**1,194**	**1,078**	**930**
Capital Appropriations													
Automated Mapping/GIS	46	46	-	-	-	-	-	-	-	-			
Adobe Creek	1,666	2,131	497	3,724	381	1,380	248	2,860	172	-			
Matadero Creek	148	1,784	5,088	4,838	477	383	2,494	1,097	34	35			
Permanente Creek	475	1,425	2,290	983	6,447	10,175	5,189	-	-	-			
San Francisquito Creek Gabion Bank	-	-	-		505	938							
Stevens Creek - Fish Ladder Mod.	37	97	-		-	-							
TOTAL	**2,372**	**5,483**	**7,875**	**9,545**	**7,810**	**12,876**	**7,932**	**3,957**	**207**	**35**	**-**	**-**	**-**
Balance Available after CIP	**13,294**	**11,859**	**7,863**	**30,401**	**24,241**	**12,655**	**5,354**	**1,604**	**1,375**	**1,281**	**1,194**	**1,078**	**930**
Required Operating Reserves (50% of operating outlays)	2,416	2,544	2,673	3,881	3,921	3,962	4,004	4,047	4,091	4,136	4,181	4,228	4,275
Available Operating Reserves	2,416	2,544	2,673	3,881	3,921	3,962	4,004	1,604	1,375	1,281	1,194	1,078	930
Capital Reserves	10,878	9,314	5,190	26,520	20,320	8,693	1,350	-	-	-	-	-	-
TOTAL RESERVES	**13,294**	**11,859**	**7,863**	**30,401**	**24,241**	**12,655**	**5,354**	**1,604**	**1,375**	**1,281**	**1,194**	**1,078**	**930**
Issue New Certificates of Participation			**30,000**										

Baseline Program Assumptions

1) 1997-98 beginning reserve balance if from the FY 1996-97 audited financial statement.
2) Utilize available remaining debt capacity by 6/2000 to finance Capital Program.
3) Level of Service for maintenance and operations reduced to a level that can be supported by available annual operating revenue.
4) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year and modified to reflect the baseline strategy.
5) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.
8) Maintenance and operations costs will increase at 2% per year after FY 00/01.

Table 2-5

CHAPTER 3
NORTH CENTRAL FLOOD CONTROL ZONE

This chapter provides background information developed for the North Central Zone and reviewed with the Zone Advisory Committee to create a baseline program. The following information is provided in this chapter:

- Zone Map showing the Remaining One Percent Flood Area (Figure 3-1)
- Partial List of Remaining Capital Projects (Table 3-1)
- Historical Program Expenditures Summary Sheet (Table 3-2)
- Current Program Cash Flow Projection (Table 3-3)
- Level of Service Worksheet and Proposed Year 2000 Budget (Table 3-4)
- Baseline Program Cash Flow Projection (Table 3-5)

This zone includes the City of Saratoga and portions of the cities Sunnyvale, Santa Clara, Campbell, Cupertino, Monte Sereno, San Jose, and Los Gatos. It contains the watersheds which drain into the Guadalupe Slough, which includes Sunnyvale East and West Outfalls, and Calabazas, Saratoga, Wildcat, and San Tomas Aquino Creeks. Figure 3-1 shows a map of the zone and indicates the areas currently subject to flooding from a 1 percent flood. Since 1982, portions of Saratoga, Calabazas, and San Tomas Aquino Creeks have been constructed and this flood map reflects the work completed to date. Table 3-1 lists the remaining capital projects which will address the remaining flood hazard in the zone, including the threat of tidal flooding.

The Historical Program Expenditures Sheet summarizes all of the actual program costs from 1981 through 1996. Also included were the budgeted expenditures for FY 96-97 and 97-98. This information was reviewed with the Committee to provide background and reference for development of the baseline program after year 2000.

Current Program Cash Flow

This cash flow represents a continuation of the current program through the year 2010. It assumes reduced revenues due to the benefit assessment sunset, maintaining the current level of service for operations and maintenance (including mitigation costs), and a continuation of the current capital improvement program. A review of the cash flow indicates the zone will not be able to maintain adequate operating reserves as early as FY 98-99 if the current program expenditures continue. Additionally, insufficient revenues exist starting in FY 98-99 to cover projected annual operating outlays. The zone's remaining debt capacity of $1 million was not utilized in this cash flow.

Baseline Program Level of Service

The Level of Service Worksheet provides a basis for determining the baseline program. A review of the worksheet indicates that the projected annual revenue of $4.4 million (less debt service) after year 2000 will only support a program of Level of Service E. With this level of service only District-owned improved facilities and a portion of the unimproved facilities are maintained at the current level.

Baseline Program Cash Flow

The Baseline Program Cash Flow lays out a fundable operating program and a *minimum* capital construction program which utilizes the $1 million remaining debt capacity. This cash flow assumes a reduced level of service for operations and maintenance and is consistent with the Baseline Capital Improvement Strategy described in below.

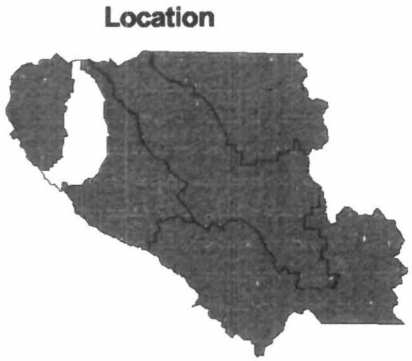
Baseline Capital Improvement Strategy

It is recommended that the North Central Zone issue the authorized $1.0 million debt in order to complete the Calabazas Creek construction.

In summary the strategy is to:

- Issue authorized $1 million new debt
  - Complete construction of Calabazas Creek

North Central Zone
1% Flood Limits



One Percent Flood Area

(Includes Flooding of Less Than 1 Ft. Depth)

Not to Scale

Figure 3-1

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686

TABLE 3-1

FUNDED PROJECTS IDENTIFIED IN THE DRAFT 1998-99 CIP
($ Millions)

Calabazas Creek (Guadalupe Slough to Miller)	$ 2.9
TOTAL	**$ 2.9**

UNFUNDED PROJECTS
($ Millions)

Calabazas Creek (Miller to Wardell)	$ 24.0
Saratoga Creek (Prospect to Fourth Street)	not available
San Tomas Aquino Creek	not available
San Tomas Remediation (North Hwy 101)	$ 11.0
Sediment Basins	not available
Sunnyvale East	$ 5.0
Wildcat Creek	not available
Regnart Creek	not available
Sunnyvale West	$ 5.0
Guadalupe Slough	not available
Bayfront Levees	not available
TOTAL 〉	**$ 45.0**

*** THIS IS A PARTIAL LIST OF REMAINING PROJECTS**

NORTH CENTRAL FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 3-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
I. DEBT SERVICE	$ -	$ -	$ 2,831	$ 1,979	$ 1,958
II. MAINTENANCE					
1) Sediment and Silt Removal	$ 1,871	$ 719	$ 1,302	$ -	$ -
2) Erosion Prevention and Repair	$ 2,147	$ 1,384	$ 964	$ -	$ -
3) Vegetation and Weed Abatement	$ 1,009	$ 1,574	$ 2,356	$ -	$ -
4) Property and Appurtenances Maintenance	$ 480	$ 231	$ 265	$ -	$ -
5) Trash and Debris Removal	$ -	$ 81	$ 129	$ -	$ -
6) Graffiti Removal	$ -	$ 6	$ 67	$ -	$ -
7) Fencing and Signage	$ -	$ 274	$ 388	$ -	$ -
8) General Maint./Engineering/Administrative Staffing	$ 1,976	$ 534	$ 600	$ 1,834	$ 1,526
9) Levee Maintenance	$ 78	$ 26	$ 922	$ -	$ -
10) Maintenance Warehouse	$ -	$ -	$ 150	$ 95	$ 140
11) Hazmat Investigation, Removal and Disposal	$ 2	$ 3	$ 47	$ 48	$ 48
Subtotal	**$ 7,563**	**$ 4,832**	**$ 7,190**	**$ 1,977**	**$ 1,714**
III. EMERGENCY SERVICES					
1) Flood Awareness Program	$ -	$ -	$ 3	$ 88	$ 108
2) Emergency Operation Center	$ 120	$ 649	$ 197	$ 33	$ 26
3) Sandbag Work	$ -	$ -	$ 20	$ -	$ 40
Subtotal	**$ 120**	**$ 649**	**$ 220**	**$ 121**	**$ 174**
IV. LAND USE REVIEW	**$ 497**	**$ 803**	**$ 1,397**	**$ 358**	**$ 427**
V. OPERATING PROJECTS					
1) Flood Insurance Liaison Study	$ -	$ -	$ 71	$ 12	$ 46
2) Waterways Management Planning Study	$ 157	$ 106	$ 124	$ 282	$ -
3) Automated Mapping/GIS	$ -	$ 1	$ 69	$ 32	$ 46
4) Watershed Management Coordination Project	$ -	$ -	$ 11	$ 40	$ 17
5) San Francisco Bay Shoreline Study	$ 1	$ 5	$ 8	$ -	$ -
6) Nonpoint Source	$ -	$ -	$ 908	$ 118	$ 134
7) Environmental	$ -	$ 2	$ 48	$ 68	$ 383
a. Fisheries Management Plan	$ -	$ -	$ -	$ -	$ -
b. Stream Resource Inventory	$ -	$ -	$ 7	$ 40	$ 74
c. Water Quality Study	$ -	$ -	$ 41	$ -	$ -
d. Fish Passage	$ -	$ -	$ -	$ -	$ -
e. Regulatory Agency Permit Coordination	$ -	$ 2	$ -	$ 23	$ 194
f. Red-Legged Frog Habitat Plan	$ -	$ -	$ -	$ 5	$ 40
g. Environmental Strategy	$ -	$ -	$ -	$ -	$ 75
8) Sedimentation Study	$ 12	$ -	$ -	$ -	$ -
9) Solid Waste Management Study	$ -	$ 2	$ 8	$ -	$ 85
10) Maintenance Guidelines	$ -	$ 2	$ 68	$ -	$ -
11) Maintenance Program EIR	$ -	$ -	$ 149	$ 90	$ 191
12) Environmental Policy Development	$ -	$ -	$ -	$ 29	$ -
13) Comprehensive Flood Management Project	$ -	$ -	$ -	$ 53	$ 130
14) Water Resource Integration/Coordination	$ -	$ -	$ -	$ -	$ 13
15) Regional Board Watershed Initiative	$ -	$ -	$ -	$ -	$ 36
16) Stream Water Use Communication	$ -	$ -	$ -	$ -	$ 30
Subtotal	**$ 170**	**$ 118**	**$ 1,464**	**$ 724**	**$ 1,111**

NORTH CENTRAL FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 3-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
VI. ADMINISTRATIVE					
1) Administrative	$ 298	$ 1,424	$ 1,259	$ 261	$ 131
a. Risk Management	$ 117	$ 1,115	$ 690	$ 142	$ 126
b. Auditing	$ -	$ 5	$ 18	$ 5	$ 5
c. Cost Center Support Project	$ 121	$ 304	$ 551	$ 114	$ -
2) Benefit Assessment Management	$ 33	$ 128	$ 164	$ 89	$ 68
3) Engineering Support	$ 108	$ 259	$ 362	$ 143	$ 154
a. Basic Engineering	$ 108	$ 259	$ 81	$ 5	$ 19
b. Hydrologic Data Management	$ -	$ -	$ 273	$ 133	$ 130
c. Cross Valley Level and Benchmark	$ -	$ -	$ 8	$ 5	$ 5
Subtotal	**$ 439**	**$ 1,811**	**$ 1,785**	**$ 493**	**$ 353**
VII. CAPITAL IMPROVEMENT PROJECTS					
1) Calabazas Creek	$ 1,403	$ 1,686	$ 23,983	$ 790	$ 1,481
2) Saratoga Creek	$ 2,390	$ 6,904	$ 439	$ -	$ -
3) Guadalupe Slough	$ 5	$ -	$ 1	$ -	$ -
4) San Tomas Aquino Creek	$ 2,882	$ 9	$ 942	$ 18	$ -
5) Regnart Creek	$ -	$ 18	$ -	$ -	$ -
Subtotal	**$ 6,680**	**$ 8,617**	**$ 25,365**	**$ 808**	**$ 1,481**
TOTAL	**$ 15,469**	**$ 16,830**	**$ 40,252**	**$ 6,460**	**$ 7,218**

North Central Zone Cash Flow Projection
Current Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**6,388**	**6,000**	**2,508**	**(2,960)**	**(8,780)**	**(14,709)**	**(20,748)**	**(26,898)**	**(33,163)**	**(39,545)**	**(46,046)**	**(52,668)**	**(58,425)**
Revenue Sources													
Property Tax	3,494	3,563	3,635	3,707	3,781	3,857	3,934	4,013	4,093	4,175	4,259	4,344	4,431
Benefit Assessment (Exist. Debt.)	2,710	2,764	2,819	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448
Interest	522	504	315	169	171	173	176	178	180	182	184	187	189
TOTAL	**6,725**	**6,832**	**6,770**	**6,324**	**6,400**	**6,478**	**6,557**	**6,638**	**6,721**	**6,805**	**6,891**	**6,978**	**7,067**
Operating Outlays													
Debt Service (Exist. Debt)	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958
Maintenance	1,714	3,478	5,243	7,007	7,147	7,290	7,436	7,585	7,736	7,891	8,049	8,210	8,374
Mitigation	-	989	989	989	989	989	989	989	989	989	989	-	-
All Other Operations Costs	2,065	2,106	2,148	2,191	2,235	2,280	2,326	2,372	2,419	2,468	2,517	2,568	2,619
Loan Payment to Central Zone			1,900										
TOTAL	**5,737**	**8,532**	**12,238**	**12,145**	**12,329**	**12,517**	**12,708**	**12,903**	**13,102**	**13,305**	**13,513**	**12,735**	**12,951**
Balance Available for Capital & Reserves	**7,376**	**4,299**	**(2,960)**	**(8,780)**	**(14,709)**	**(20,748)**	**(26,898)**	**(33,163)**	**(39,545)**	**(46,046)**	**(52,668)**	**(58,425)**	**(64,309)**
Capital Appropriations													
Automated Mapping/GIS	46	46	-	-									
Calabz Creek	1,331	1,745	250	249	252	216	221	169	-				
San Tomas Aquino Cr 237 to 101	-	-	-	603	403	411	11,301	625	-				
(Shaded area represents un-funded CIP) **TOTAL**	**1,376**	**1,791**	**250**	**852**	**655**	**628**	**11,522**	**794**	**-**				
Balance Available after CIP	**6,000**	**2,508**	**(2,960)**	**(8,780)**	**(14,709)**	**(20,748)**	**(26,898)**	**(33,163)**	**(39,545)**	**(46,046)**	**(52,668)**	**(58,425)**	**(64,309)**
Required Operating Reserves (50% of operating outlays)	2,869	4,266	6,119	6,072	6,164	6,258	6,354	6,452	6,551	6,653	6,756	6,368	6,475
Available Operating Reserves	2,869	2,508	-	-	-	-	-	-	-	-	-	-	-
Capital Reserves	3,131	-	-	-	-	-	-	-	-	-	-	-	-
TOTAL RESERVES	**6,000**	**2,508**	**(2,960)**	**(8,780)**	**(14,709)**	**(20,748)**	**(26,898)**	**(33,163)**	**(39,545)**	**(46,046)**	**(52,668)**	**(58,425)**	**(64,309)**

Available Debt Capacity 1,000

Current Program Assumptions

1) Continue to provide current level of service for operations and maintenance. Maintenance and mitigation cost projections based on Administrative Draft Maintenance EIR and regulatory agencies' requirements for routine work.
2) 1997-98 beginning reserve balance from the FY 1996-97 audited financial statement.
3) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year.
4) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
5) Non-maintenance operating costs will increase at 2% per year.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.

Table 3-3

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- North Central Zone

($ Thousands)

EXPENDITURE CATEGORIES	97 - 98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
MANDATED FUNCTIONS								
1) Creek Maintenance per Agreement w/ other agencies including maintenance of revegetation sites per permit requirements and activities required per court order/litigation.		$ -	$ -	$ -	$ -	$ -	$ -	
MAINTENANCE								
1) Channel Maintenance			$ 3,084	$ 7,586	$ 7,586	$ 7,586	$ 7,586	$ 2,824
a. Sediment and Silt Removal			*$ 1,364*	*$ 1,515*	*$ 1,515*	*$ 1,515*	*$ 1,515*	
b. Erosion Prevention and Repair			*$ 374*	*$ 3,738*	*$ 3,738*	*$ 3,738*	*$ 3,738*	
c. Vegetation and Weed Abatement			*$ 941*	*$ 1,344*	*$ 1,344*	*$ 1,344*	*$ 1,344*	
d. Mitigation for Channel Maintenance Activites			*$ 405*	*$ 989*	*$ 989*	*$ 989*	*$ 989*	
2) Property and Appurtenances Maintenance				$ 160	$ 200	$ 240	$ 280	$ 160
3) Trash and Debris Removal				$ 16	$ 20	$ 24	$ 28	$ 16
4) Graffiti Removal				$ 12	$ 15	$ 18	$ 21	$ 12
5) Fencing and Signage				$ 60	$ 75	$ 90	$ 105	$ 60
6) General Maintenance/Engineering/Administrative Staffing	$ 1,526	$ 40	$ 60	$ 80	$ 100	$ 120	$ 140	$ 60
7) Maintenance Warehouse	$ 140		$ 84	$ 112	$ 140	$ 168	$ 196	$ 84
8) Hazmat Investigation, Removal and Disposal	$ 48			$ 40	$ 50	$ 60	$ 70	$ 40
Subtotal	**$ 1,714**	**$ 40**	**$ 3,228**	**$ 8,066**	**$ 8,186**	**$ 8,306**	**$ 8,426**	**$ 3,256**
EMERGENCY SERVICES								
1) Flood Awareness Program	$ 108		$ 66	$ 88	$ 110	$ 132	$ 154	$ 110
2) Emergency Operation Center	$ 26		$ 18	$ 24	$ 30	$ 36	$ 42	$ 30
3) Sandbag Work	$ 40			$ 32	$ 40	$ 48	56	$ 40
Subtotal	**$ 174**	**$ -**	**$ 84**	**$ 144**	**$ 180**	**$ 216**	**$ 252**	**$ 180**
LAND USE REVIEW	**$ 427**		**$ 258**	**$ 344**	**$ 430**	**$ 516**	**$ 602**	**$ 344**

Table 3-4

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- North Central Zone

($ Thousands)

		BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE)						
EXPENDITURE CATEGORIES	97 - 98 (Budgeted)	F	E	D	C	B	A	Proposed Budget 00-01
OPERATING PROJECTS								
1) Flood Insurance Liaison Study	$ 48			$ 40	$ 50	$ 60	$ 70	$ 50
2) Waterways Management Planning Study				$ 85	$ 100	$ 120	$ 140	$ 45
3) Automated Mapping/GIS	$ 46					$ 50	$ 60	
4) Watershed Management Coordination Project	$ 17						$ 20	
5) San Francisco Bay Shoreline Study								
6) Nonpoint Source	$ 134						$ 135	
7) Environmental								
a. Fisheries Management Plan								
b. Stream Resource Inventory	$ 74						$ 75	
c. Water Quality								
d. Fish Passage								
e. Regulatory Agency Permit Coordination	$ 194		$ 120	$ 160	$ 200	$ 240	$ 280	$ 120
f. Red Legged Frog Habitat Plan/ ESA	$ 40		$ 26	$ 32	$ 40	$ 46	$ 52	$ 26
g. Environmental Strategy	$ 75						$ 75	
8) Sedimentation Study								
9) Solid Waste Management	$ 85				$ 85			
10) Maintenance Guidelines								
11) Maintenance Program EIR	$ 191		$ 200					$ 150
12) Environmental Policy Development							$ 30	
13) Comprehensive Flood Management Project	$ 130							
14) Water Resource Integration/Coordination	$ 13						$ 13	
15) Regional Board Watershed Initiative	$ 36						$ 40	
16) Stream Water Use Communication	$ 30						$ 30	
Subtotal	**$ 1,111**	**$ -**	**$ 346**	**$ 317**	**$ 475**	**$ 516**	**$ 1,020**	**$ 391**
ADMINISTRATIVE								
1) Administrative	$ 131	$ 52	$ 78	$ 104	$ 130	$ 156	$ 182	$ 78
2) Benefit Assessment Management	$ 68		$ 42	$ 56	$ 70	$ 84	$ 98	$ 42
3) Engineering Support	$ 154	$ 64	$ 96	$ 128	$ 160	$ 192	$ 224	$ 96
Subtotal	**$ 353**	**$ 116**	**$ 216**	**$ 288**	**$ 360**	**$ 432**	**$ 504**	**$ 216**
TOTAL	**$ 3,779**	**$ 156**	**$ 4,132**	**$ 9,159**	**$ 9,631**	**$ 9,986**	**$ 10,804**	**$ 4,387**

PROJECTED ANNUAL REVENUE AFTER YEAR 2000 [1] **$ 4,387**

1. Revenue projection assumes: Issuance of maximum available debt by FY 2000, Property tax will increase at 2% per year, Benefit Assessment will decrease to 1.25 times debt service, Annual interest revenue is calculated at 5.5% for 6 months (excludes interest on capital reserves), Debt service has been deducted to show available annual revenue.

Table 3-4

North Central Zone Cash Flow Projection
Baseline Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**6,388**	**6,000**	**4,100**	**4,664**	**4,672**	**4,665**	**4,681**	**4,682**	**4,723**	**4,922**	**5,119**	**5,315**	**5,507**
Revenue Sources													
Property Tax	3,494	3,563	3,635	3,707	3,781	3,857	3,934	4,013	4,093	4,175	4,259	4,344	4,431
Benefit Assessment (Exist. Debt.)	2,710	2,764	2,819	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448	2,448
Benefit Assessment (New Debt.)				90	90	90	90	90	90	90	90	90	90
Interest	522	504	403	428	431	432	435	438	442	455	468	482	495
TOTAL	**6,725**	**6,832**	**6,857**	**6,673**	**6,750**	**6,827**	**6,907**	**6,988**	**7,073**	**7,168**	**7,265**	**7,363**	**7,463**
Operating Outlays													
Debt Service (Exist. Debt)	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958	1,958
Debt Service (For New COP)				72	72	72	72	72	72	72	72	72	72
Maintenance (includes mitigation for maint.)	1,714	2,228	2,742	3,256	3,321	3,388	3,455	3,524	3,595	3,667	3,740	3,815	3,891
All Other Operations Costs	2,065	1,754	1,443	1,131	1,154	1,177	1,200	1,224	1,249	1,274	1,299	1,325	1,352
		1,000	900										
TOTAL	**5,737**	**6,940**	**7,043**	**6,417**	**6,505**	**6,594**	**6,686**	**6,779**	**6,874**	**6,970**	**7,069**	**7,170**	**7,273**
Balance Available for Capital & Reserves	**7,376**	**5,891**	**3,914**	**4,920**	**4,917**	**4,898**	**4,903**	**4,892**	**4,922**	**5,119**	**5,315**	**5,507**	**5,697**
Capital Appropriations													
Automated Mapping/GIS	46	46	-	-									
Cabalazas Creek	1,331	1,745	250	249	252	216	221	169	-				
TOTAL	**1,376**	**1,791**	**250**	**249**	**252**	**216**	**221**	**169**	**-**				
Balance Available after CIP	**6,000**	**4,100**	**3,664**	**4,672**	**4,665**	**4,681**	**4,682**	**4,723**	**4,922**	**5,119**	**5,315**	**5,507**	**5,697**
Required Operating Reserves (50% of operating outlays)	2,869	3,470	3,522	3,209	3,252	3,297	3,343	3,389	3,437	3,485	3,535	3,585	3,636
Available Operating Reserves	2,869	3,470	3,664	3,209	3,252	3,297	3,343	3,389	3,437	3,485	3,535	3,585	3,636
Capital Reserves	3,131	630	143	1,463	1,413	1,384	1,340	1,334	1,485	1,634	1,780	1,922	2,061
TOTAL RESERVES	**6,000**	**4,100**	**3,664**	**4,672**	**4,665**	**4,681**	**4,682**	**4,723**	**4,922**	**5,119**	**5,315**	**5,507**	**5,697**
Issue New Certificates of Participation			**1,000**										

Baseline Program Assumptions

1) 1997-98 beginning reserve balance if from the FY 1996-97 audited financial statement.
2) Utilize available remaining debt capacity by 6/2000 to finance Capital Program.
3) Level of Service for maintenance and operations reduced to a level that can be supported by available annual operating revenue.
4) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year and modified to reflect the baseline strategy.
5) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.
8) Maintenance and operations costs will increase at 2% per year after FY 00/01.

w:\...\NC Cash Flow Baseline

Table 3-5

2/24/98

Chapter 4
CENTRAL FLOOD CONTROL ZONE

This chapter provides background information developed for the Central Zone and reviewed with the Zone Advisory Committee to create a baseline program. The following information is provided in this chapter:

- Zone Map showing the Remaining One Percent Flood Area (Figure 4-1)
- Partial List of Remaining Capital Projects (Table 4-1)
- Historical Program Expenditures Summary Sheet (Table 4-2)
- Current Program Cash Flow Projection (Table 4-3)
- Level of Service Worksheet and Proposed Year 2000 Budget (Table 4-4)
- Baseline Program Cash Flow Projection (Table 4-5)

This zone includes portions of the cities of Santa Clara, San Jose, Campbell, Monte Sereno, and Los Gatos. It covers the tributaries and sub-watersheds of the Guadalupe River, which flows through downtown San Jose. Figure 4-1 shows a map of the zone and indicates the areas currently subject to flooding from a 1 percent flood. Since 1982, portions of the Guadalupe River have been constructed, although this map does not reflect the work completed to date. Table 4-1 is a partial list of the remaining capital projects which will address the remaining flood hazard in the zone, including the threat of tidal flooding.

The Historical Program Expenditures Sheet summarizes all of the actual program costs from 1981 through 1996. Also included were the budgeted expenditures for FY 96-97 and 97-98. This information was reviewed with the Committee to provide background and reference for development of the baseline program after year 2000.

Current Program Cash Flow

This cash flow represents a continuation of the current program through the year 2010. It assumes reduced revenues due to the benefit assessment sunset, maintaining the current level of service for operations and maintenance (including mitigation costs), and a continuation of the current capital improvement program. A review of the cash flow indicates the zone will not be able to maintain adequate operating reserves as early as FY 99-00 if the current program expenditures continue. Additionally, insufficient revenues exist starting in FY 00-01 to cover projected annual operating outlays. The zone's remaining debt capacity of $10 million was not utilized in this cash flow.

Baseline Program Level of Service

The Level of Service Worksheet provides a basis for determining the baseline program. A review of the worksheet indicates that the projected annual revenue of $5.3 million (less debt service) after year 2000 will only support a program between Level of Service D and E. With this level of service only District-owned improved facilities and a portion of the unimproved facilities are maintained at the current level.

Baseline Program Cash Flow

The Baseline Program Cash Flow lays out a fundable operating program and capital construction program which utilizes the $10 million remaining debt capacity. This cash flow assumes a reduced level of service

for operations and maintenance and is consistent with the Baseline Capital Improvement Strategy described in detail below.

Baseline Capital Improvement Strategy

It is recommended that the Central Zone issue the authorized $10 million debt in order to continue the Downtown Guadalupe River construction. Additionally, the planning studies for the Lower Guadalupe River and the Upper Guadalupe River (both the District's study and the joint feasibility study with the Corps) should be completed. Finally, the Upper Guadalupe River voluntary right-of-way acquisition program should continue to be funded at some level.

Outstanding subventions claims for expenditures from the Guadalupe River project in the amount of $23.1 million should continue to be actively pursued. In addition, continuing to pursue funding of the subventions program to ensure reimbursement of claims should remain a priority.

In summary the strategy is to:

- Issue authorized $10 million new debt
- Continue to plan and construct highest priority capital projects.
  - Continue Downtown Guadalupe River construction.
  - Continue Lower Guadalupe River Planning Study.
  - Complete Upper Guadalupe River Planning Studies (SCVWD & Corps Studies).
  - Continue Upper Guadalupe River voluntary right-of-way acquisition program.

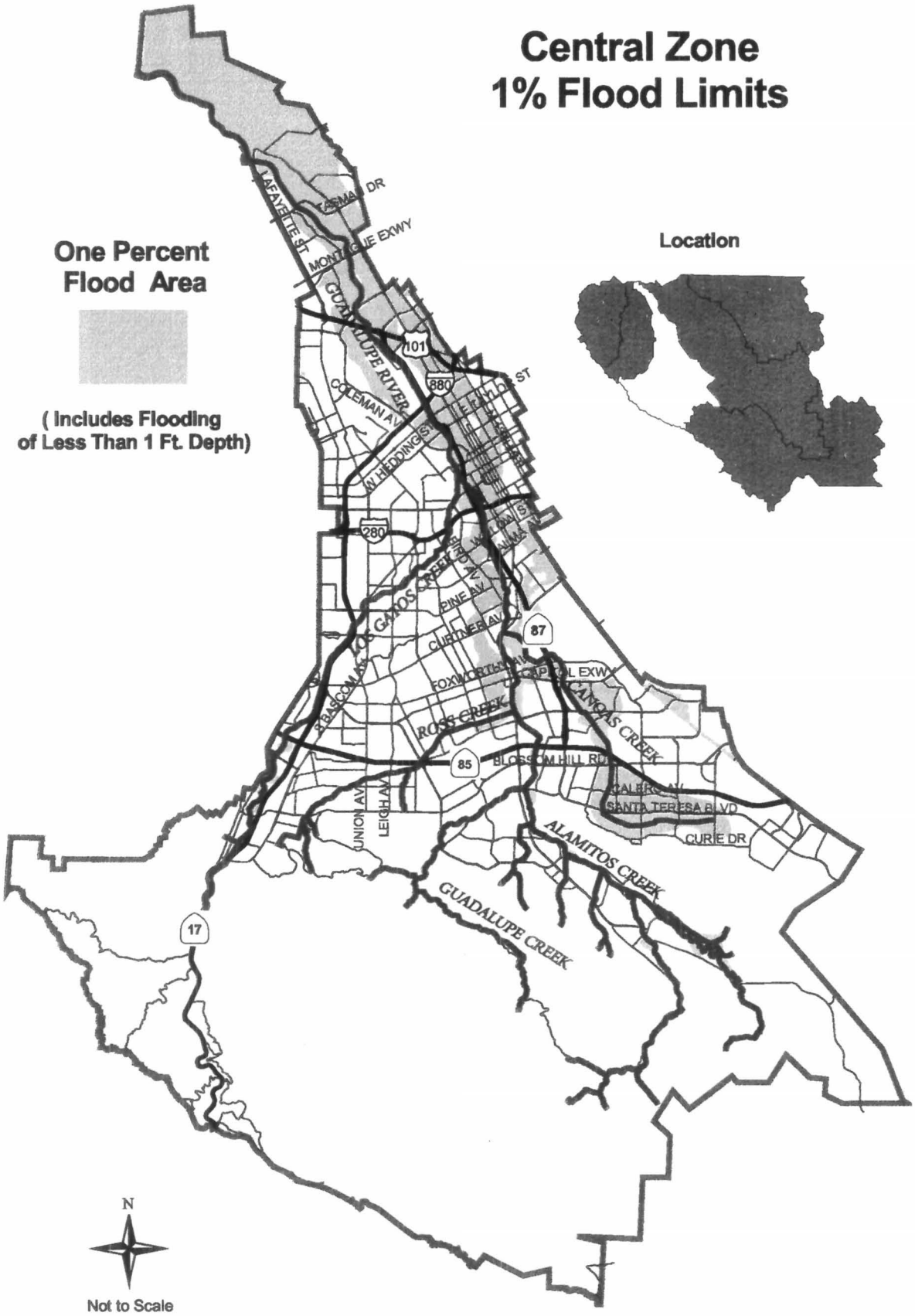


Figure 4-1

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686

TABLE 4-1

FUNDED PROJECTS IDENTIFIED IN THE DRAFT 1998-99 CIP
($ Millions)

Lower Guadalupe River (San Francisco Bay to I-880)	$ 19.3
Upper Guadalupe River (I-280 to Blossom Hill Rd) Planning	$ 0.6
Upper Guadalupe River (I-280 to Blossom Hill Rd) (Corps)	$ 0.7
Downtown Guadalupe River (I-880 to I-280)	$ 18.9
TOTAL	**$ 39.5**

UNFUNDED PROJECTS
($ Millions)

Upper Guadalupe River (I-280 to Blossom Hill)	$ 114.0
Ross Creek	$ 5.0
Randol Creek	not available
Los Gatos Creek	$ 11.5
Canoas Creek	$ 6.3
Alamitos Creek - Fish Ladders	$ 0.1
TOTAL 〉	**$ 136.9**

*** THIS IS A PARTIAL LIST OF REMAINING PROJECTS**

CENTRAL FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 4-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
I. DEBT SERVICE	$ -	$ -	$ 7,076	$ 4,284	$ 4,281
II. MAINTENANCE					
1) Sediment and Silt Removal	$ 407	$ 521	$ 490	$ -	$ -
2) Erosion Prevention and Repair	$ 2,393	$ 639	$ 689	$ -	$ -
3) Vegetation and Weed Abatement	$ 1,516	$ 1,756	$ 3,127	$ -	$ -
4) Property and Appurtenances Maintenance	$ 871	$ 331	$ 1,474	$ -	$ -
5) Trash and Debris Removal	$ -	$ 135	$ 253	$ -	$ -
6) Graffiti Removal	$ -	$ -	$ 55	$ -	$ -
7) Fencing and Signage	$ -	$ 134	$ 379	$ -	$ -
8) General Maint./Engineering/Administrative Staffing	$ 502	$ 674	$ 665	$ 2,030	$ 2,259
9) Levee Maintenance	$ 76	$ -	$ 2,460	$ -	$ -
10) Maintenance Warehouse	$ -	$ -	$ 325	$ 163	$ 300
11) Hazmat Investigation, Removal and Disposal	$ -	$ 21	$ 88	$ 49	$ 70
Subtotal	**$ 5,765**	**$ 4,211**	**$ 10,005**	**$ 2,242**	**$ 2,629**
III. EMERGENCY SERVICES					
1) Flood Awareness Program	$ -	$ -	$ 4	$ 114	$ 139
2) Emergency Operation Center	$ 258	$ 792	$ 193	$ 56	$ 56
3) Sandbag Work	$ -	$ -	$ 128	$ -	$ 40
Subtotal	**$ 258**	**$ 792**	**$ 325**	**$ 170**	**$ 235**
IV. LAND USE REVIEW	**$ 668**	**$ 998**	**$ 1,525**	**$ 400**	**$ 453**
V. OPERATING PROJECTS					
1) Flood Insurance Liaison Study	$ -	$ -	$ 81	$ 16	$ 62
2) Waterways Management Planning Study	$ 225	$ 105	$ 126	$ 282	$ -
3) Automated Mapping/GIS	$ -	$ -	$ 69	$ 32	$ 46
4) Watershed Management Coordination Project	$ -	$ -	$ 11	$ 40	$ 17
5) San Francisco Bay Shoreline Study	$ 1	$ 5	$ 8	$ -	$ -
6) Nonpoint Source	$ -	$ -	$ 908	$ 118	$ 134
7) Environmental	$ -	$ -	$ 156	$ 602	$ 880
a. Fisheries Management Plan	$ -	$ -	$ 48	$ 296	$ 239
b. Stream Resource Inventory	$ -	$ -	$ 44	$ 40	$ 74
c. Water Quality Study	$ -	$ -	$ 41	$ -	$ -
d. Fish Passage	$ -	$ -	$ 23	$ 222	$ 452
e. Regulatory Agency Permit Coordination	$ -	$ -	$ -	$ 39	$ -
f. Red-Legged Frog Habitat Plan	$ -	$ -	$ -	$ 5	$ 40
g. Environmental Strategy	$ -	$ -	$ -	$ -	$ 75
8) Sedimentation Study	$ -	$ -	$ -	$ -	$ -
9) Solid Waste Management	$ -	$ -	$ -	$ -	$ 39
10) Maintenance Guidelines	$ -	$ 2	$ 63	$ -	$ -
11) Maintenance Program EIR	$ -	$ -	$ 149	$ 90	$ 191
12) Environmental Policy Development	$ -	$ -	$ -	$ 53	$ -
13) Comprehensive Flood Management Project	$ -	$ -	$ -	$ -	$ 130
14) Water Resource Integration/Coordination	$ -	$ -	$ -	$ 29	$ 13
15) Regional Board Watershed Initiative	$ -	$ -	$ -	$ -	$ 36
16) Stream Water Use Communication	$ -	$ -	$ -	$ -	$ 30
Subtotal	**$ 226**	**$ 112**	**$ 1,571**	**$ 1,262**	**$ 1,578**

CENTRAL FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 4-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
VI. ADMINISTRATIVE					
1) Administrative	$ 263	$ 971	$ 1,769	$ 432	$ 215
a. Risk Management	$ 115	$ 720	$ 1,075	$ 246	$ 204
b. Auditing	$ -	$ 5	$ 37	$ -	$ 11
c. Cost Center Support Project	$ 148	$ 246	$ 657	$ 186	$ -
2) Benefit Assessment Management	$ 36	$ 153	$ 379	$ 231	$ 177
3) Engineering Support	$ 187	$ 374	$ 708	$ 243	$ 328
a. Basic Engineering	$ 187	$ 374	$ 105	$ 8	$ 40
b. Hydrologic Data Management	$ -	$ -	$ 586	$ 128	$ 278
c. Cross Valley Level and Benchmark	$ -	$ -	$ 17	$ 8	$ 10
Subtotal	**$ 486**	**$ 1,498**	**$ 2,856**	**$ 906**	**$ 720**
VII. CAPITAL IMPROVEMENT PROJECTS					
1) Guadalupe River	$ 8,826	$ 27,646	$ 89,925	$ 7,120	$ 4,212
a. Downtown Guadalupe R. Proj (Hwy 880-Hwy 280)	$ 593	$ 14,753	$ 68,407	$ 3,313	$ 2,063
b. Upper Guadalupe R. Proj(Hwy 280-Blossom Hill Road)	$ 3,031	$ 11,511	$ 15,347	$ 2,076	$ 1,063
c. Lower Guadalupe River (Alviso to Hwy 880)	$ 5,202	$ 1,382	$ 6,171	$ 1,731	$ 1,086
2) Alamitos Creek	$ 1,467	$ 567	$ 570	$ -	$ -
3) Los Gatos Creek	$ 10	$ -	$ -	$ -	$ 365
4) Lower Coyote Projects	$ 2,761	$ 1,036	$ -	$ -	$ -
5) Ross Creek	$ 250	$ -	$ -	$ -	$ -
6) Randol Creek	$ 4	$ 6	$ 12	$ -	$ -
7) Canoas Creek	$ 2	$ -	$ 90	$ -	$ -
Subtotal	**$ 13,320**	**$ 29,255**	**$ 90,597**	**$ 7,120**	**$ 4,577**
TOTAL	**$ 20,723**	**$ 36,866**	**$ 113,955**	**$ 16,384**	**$ 14,473**

Central Zone Cash Flow Projection
Current Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**42,730**	**39,949**	**19,155**	**20,764**	**16,805**	**12,516**	**7,877**	**2,865**	**(2,541)**	**(8,227)**	**(14,037)**	**(19,973)**	**(25,336)**
Revenue Sources													
Property Tax	3,586	3,658	3,731	3,805	3,882	3,959	4,038	4,119	4,202	4,286	4,371	4,459	4,548
Benefit Assessment (Exist. Debt.)	7,510	7,660	7,813	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351
Interest	2,655	2,508	1,371	1,394	1,178	944	691	418	263	265	267	270	272
Cap. Reimb./Subven./Other *	-	2,126	1,900										
TOTAL	**13,751**	**15,952**	**14,815**	**10,550**	**10,411**	**10,255**	**10,081**	**9,888**	**9,815**	**9,902**	**9,990**	**10,080**	**10,171**
Operating Outlays													
Debt Service (Exist. Debt)	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281
Maintenance	2,629	3,873	5,117	6,358	6,485	6,615	6,747	6,882	7,020	7,160	7,303	7,449	7,598
Mitigation for Maintenance Activities		702	702	702	702	702	702	702	702	702	702		
All Other Operations Costs	2,986	3,046	3,107	3,169	3,232	3,297	3,363	3,430	3,499	3,569	3,640	3,713	3,787
TOTAL	**9,896**	**11,901**	**13,206**	**14,509**	**14,700**	**14,894**	**15,093**	**15,295**	**15,501**	**15,711**	**15,926**	**15,443**	**15,666**
Balance Available for Capital & Reserves	**46,586**	**44,000**	**20,764**	**16,805**	**12,516**	**7,877**	**2,865**	**(2,541)**	**(8,227)**	**(14,037)**	**(19,973)**	**(25,336)**	**(30,831)**
Capital Appropriations													
Automated Mapping/GIS	46	46	-	-									
Alamitos Cr. Fish Ladders	-	-	45	46	94								
Canoas Cr - Nightingale	-	-	-	264	270	600	280	286	292				
Upper Guadalupe River	1,063	10,691	19,684	25,565	3,334	276	-	-					
Lower Guadalupe River	1,086	4,343	6,824	6,164	864	-	-						
Downtown Guadalupe River	4,061	9,640	2,283	1,494	1,338	64	-						
Los Gatos Cr Erosion Repairs	365	125	-	-	-	-	-						
Guad Crk Fish Ladders (FY 97/98 Only)	16	-	-	-	-	-	-						
(Shaded area represents un-funded CIP) **TOTAL**	**6,636**	**24,845**	**28,835**	**33,534**	**5,900**	**940**	**280**	**286**	**292**				
Balance Available after CIP	**39,949**	**19,155**	**20,764**	**16,805**	**12,516**	**7,877**	**2,865**	**(2,541)**	**(8,227)**	**(14,037)**	**(19,973)**	**(25,336)**	**(30,831)**
Required Operating Reserves (50% of Operating Outlays)	4,948	5,951	6,603	7,255	7,350	7,447	7,546	7,647	7,750	7,856	7,963	7,721	7,833
Available Operating Reserves	4,948	5,951	6,603	7,255	7,350	7,447	2,865	-	-	-	-	-	-
Capital Reserves	35,001	13,205	14,161	9,551	5,166	430	-	-	-	-	-	-	-
TOTAL RESERVES	**39,949**	**19,155**	**20,764**	**16,805**	**12,516**	**7,877**	**2,865**	**(2,541)**	**(8,227)**	**(14,037)**	**(19,973)**	**(25,336)**	**(30,831)**

*Includes repayment of North Central Zone loan

Available Debt Capacity 10,000

Current Program Assumptions

1) Continue to provide current level of service for operations and maintenance. Maintenance and mitigation cost projections based on Administrative Draft Maintenance EIR and regulatory agencies' requirements for routine work.
2) 1997-98 beginning reserve balance from the FY 1996-97 audited financial statement.
3) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year.
4) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
5) Non-maintenance operating costs will increase at 2% per year.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.

Table 4-3

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- Central Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
MANDATED FUNCTIONS								
1) Creek Maintenance per Agreement w/ other agencies including maintenance of revegetation sites per permit requirements and activities required per court order/litigation.		$ 1,100	$ 1,100	$ 1,100	$ 1,100	$ 1,100	$ 1,100	1,100
MAINTENANCE								
1) Channel Maintenance*		$ 1,240	$ 2,966	$ 6,300	$ 6,300	$ 6,300	$ 6,300	3,467
a) Sediment and Silt Removal	$ -		*$ 1,080*	*$ 1,200*	*$ 1,200*	*$ 1,200*	*$ 1,200*	
b) Erosion Prevention and Repair	$ -		*$ 254*	*$ 2,538*	*$ 2,538*	*$ 2,538*	*$ 2,538*	
c) Vegetation and Weed Abatement			*$ 1,302*	*$ 1,860*	*$ 1,860*	*$ 1,860*	*$ 1,860*	
d) Mitigation for Channel Maintenance Activities		*$ 409*	*$ 330*	*$ 702*	*$ 702*	*$ 702*	*$ 702*	
2) Property and Appurtenances Maintenance	$ -		$ 300	$ 400	$ 500	$ 600	$ 700	300
3) Trash and Debris Removal	$ -		$ 30	$ 40	$ 50	$ 60	$ 70	30
4) Graffiti Removal	$ -		$ 6	$ 8	$ 10	$ 12	$ 14	6
5) Fencing and Signage	$ -		$ 60	$ 80	$ 100	$ 120	$ 140	60
6) General Maintenance/Engineering/Administrative Staffing	$ 2,259	$ 40	$ 60	$ 80	$ 100	$ 120	$ 140	60
7) Maintenance Warehouse	$ 300	$ 120	$ 180	$ 240	$ 300	$ 360	$ 420	180
8) Hazmat Investigation, Removal, and Disposal	$ 70		$ 42	$ 56	$ 70	$ 84	$ 98	42
Subtotal	**$ 2,629**	**$ 1,669**	**$ 3,644**	**$ 7,204**	**$ 7,430**	**$ 7,656**	**$ 7,882**	**4,145**
* Includes $1.1 million in mandated functions.								
EMERGENCY SERVICES								
1) Flood Awareness Program	$ 139		$ 84	$ 112	$ 140	$ 168	$ 196	112
2) Emergency Operation Center	$ 56		$ 36	$ 48	$ 60	$ 72	$ 84	48
3) Sandbag Work	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	32
Subtotal	**$ 235**	**$ -**	**$ 144**	**$ 192**	**$ 240**	**$ 288**	**$ 336**	**192**
LAND USE REVIEW	**$ 453**		**$ 270**	**$ 360**	**$ 450**	**$ 540**	**$ 630**	**360**

Table 4-4

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- Central Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
OPERATING PROJECTS								
1) Flood Insurance Liaison Study	$ 62			$ 48	$ 60	$ 72	$ 84	
2) Waterways Management Planning Study	$ -				$ 100	$ 120	$ 140	
3) Automated Mapping/GIS	$ 46					$ 50	$ 60	
4) Watershed Management Coordination Project	$ 17						$ 20	
5) San Francisco Bay Shoreline Study	$ -							
6) Nonpoint Source	$ 134						$ 135	
7) Environmental								
a. Fisheries Management Plan	$ 239							
b. Stream Resource Inventory	$ 74						$ 75	
c. Water Quality	$ -							
d. Fish Passage	$ 452							
e. Regulatory Agency Permit Coordination	$ -		$ 24	$ 32	$ 40	$ 48	$ 56	24
f. Red Legged Frog Habitat Plan/ ESA	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	24
g. Environmental Strategy	$ 75						$ 75	
8) Sedimentation Study	$ -							
9) Solid Waste Management	$ 39				$ 40			
10) Maintenance Guidelines	$ -							
11) Maintenance Program EIR	$ 191		$ 200					150
12) Environmental Policy Development	$ -							
13) Comprehensive Flood Management Project	$ 130							
14) Water Resource Integration/Coordination	$ 13						$ 13	
15) Regional Board Watershed Initiative	$ 36						$ 40	
16) Stream Water Use Communication	$ 30						$ 30	
Subtotal	**$ 1,578**	**$ -**	**$ 248**	**$ 112**	**$ 280**	**$ 338**	**$ 784**	**198**
ADMINISTRATIVE								
1) Administrative	$ 215	$ 86	$ 129	$ 172	$ 215	$ 258	$ 301	129
2) Benefit Assessment Management	$ 177		$ 108	$ 144	$ 180	$ 216	$ 252	108
3) Engineering Support	$ 328	$ 132	$ 200	$ 264	$ 330	$ 400	$ 460	200
Subtotal	**$ 720**	**$ 218**	**$ 437**	**$ 580**	**$ 725**	**$ 874**	**$ 1,013**	**$ 437**
TOTAL	**$ 5,615**	**$ 1,887**	**$ 4,743**	**$ 8,448**	**$ 9,125**	**$ 9,696**	**$ 10,645**	**$ 5,332**

PROJECTED ANNUAL REVENUE AFTER YEAR 2000 [1] **$ 5,332**

1. Revenue projection assumes: Issuance of maximum available debt by FY 2000, Property tax will increase at 2% per year, Benefit Assessment will decrease to 1.25 times debt service, Annual interest revenue is calculated at 5.5% for 6 months (excludes interest on capital reserves), Debt service has been deducted to show available annual revenue.

Table 4-4

Central Zone Cash Flow Projection
Baseline Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**42,730**	**39,949**	**29,053**	**33,388**	**23,388**	**19,301**	**17,079**	**17,378**	**18,216**	**12,200**	**7,837**	**3,104**	**1,792**
Revenue Sources													
Property Tax	3,586	3,658	3,731	3,805	3,882	3,959	4,038	4,119	4,202	4,286	4,371	4,459	4,548
Benefit Assessment (Exist. Debt.)	7,510	7,660	7,813	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351	5,351
Benefit Assessment (For new Debt)				899	899	899	899	899	899	899	899	899	899
Interest	2,655	2,508	1,915	2,113	1,565	1,342	1,222	1,241	1,289	961	723	465	396
Cap. Reimb./Subven./Other *	-	2,126	1,900										
TOTAL	**13,751**	**15,952**	**15,360**	**12,169**	**11,697**	**11,552**	**11,511**	**11,611**	**11,741**	**11,497**	**11,345**	**11,174**	**11,194**
Operating Outlays													
Debt Service (Exist. Debt)	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281	4,281
Debt Service (For New COP)				719	719	719	719	719	719	719	719	719	719
Maintenance (Includes Mitigation for Maint.)	2,629	3,134	3,640	4,145	4,228	4,312	4,399	4,487	4,576	4,668	4,761	4,857	4,954
All Other Operations Costs	2,986	2,386	1,787	1,187	1,211	1,235	1,260	1,285	1,311	1,337	1,364	1,391	1,419
TOTAL	**9,896**	**9,802**	**9,707**	**10,332**	**10,439**	**10,548**	**10,659**	**10,772**	**10,887**	**11,005**	**11,125**	**11,248**	**11,373**
Balance Available for Capital & Reserves	**46,586**	**46,100**	**34,705**	**35,224**	**24,646**	**20,305**	**17,931**	**18,216**	**19,071**	**12,692**	**8,056**	**3,031**	**1,613**
Capital Appropriations													
Automated Mapping/GIS	46	47											
Upper Guadalupe River	1,063	2,738	2,029	3,038	3,099	3,161	553	-	6,870	4,855	4,952	1,238	596
Lower Guadalupe River	1,086	4,430	6,960	6,288	881	-							
Downtown Guadalupe River	4,061	9,833	2,328	1,524	1,365	65							
Los Gatos Cr Erosion Repairs	365	-	-										
Guad Crk Fish Ladders	16	-	-										
TOTAL	**6,636**	**17,048**	**11,317**	**10,850**	**5,345**	**3,226**	**553**	**-**	**6,870**	**4,855**	**4,952**	**1,238**	**596**
Balance Available after CIP	**39,949**	**29,053**	**23,388**	**24,374**	**19,301**	**17,079**	**17,378**	**18,216**	**12,200**	**7,837**	**3,104**	**1,792**	**1,018**
Required Operating Reserves (50% of operating outlays)	4,948	4,901	4,854	5,166	5,219	5,274	5,329	5,386	5,444	5,503	5,563	5,624	5,686
Available Operating Reserves	4,948	4,901	4,854	5,166	5,219	5,274	5,329	5,386	5,444	5,503	3,104	1,792	1,018
Capital Reserves	35,001	24,152	18,534	19,208	14,081	11,805	12,048	12,831	6,757	2,334	-	-	-
TOTAL RESERVES	**39,949**	**29,053**	**23,388**	**24,374**	**19,301**	**17,079**	**17,378**	**18,216**	**12,200**	**7,837**	**3,104**	**1,792**	**1,018**
Issue New Certificates of Participation			**10,000**										

*Includes repayment of North Central Zone loan

Baseline Program Assumptions

1) 1997-98 beginning reserve balance if from the FY 1996-97 audited financial statement.
2) Utilize available remaining debt capacity by 6/2000 to finance Capital Program.
3) Level of Service for maintenance and operations reduced to a level that can be supported by available annual operating revenue.
4) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year and modified to reflect the baseline strategy.
5) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.
8) Maintenance and operations costs will increase at 2% per year after FY 00/01.

Table 4-5

w:\...\Central Cash Flow Baseline

2/24/98

CHAPTER 5
EAST FLOOD CONTROL ZONE

This chapter provides background information developed for the East Zone and reviewed with the Zone Advisory Committee to create a baseline program. The following information is provided in this chapter:

- Zone Map showing the Remaining One Percent Flood Area (Figure 5-1)
- Partial List of Remaining Capital Projects (Table 5-1)
- Historical Program Expenditures Summary Sheet (Table 5-2)
- Current Program Cash Flow Projection (5-3)
- Level of Service Worksheet and Proposed Year 2000 Budget (Table 5-4)
- Baseline Program Cash Flow Projection (5-5)

This zone includes the City of Milpitas and portions of the cities of San Jose, Campbell, and Morgan Hill. It covers the tributaries and sub-watersheds of Coyote Creek which drains to San Francisco Bay. Figure 5-1 shows a map of the zone and indicates the areas currently subject to flooding from a 1 percent flood. Since 1982, portions of Coyote, Lower Penitencia, Thompson, Silver, and Wrigley-Ford Creeks have been constructed and this flood map reflects the work completed to date. Table 5-1 is a partial list of the remaining capital projects which will address the remaining flood hazard in the zone.

The Historical Program Expenditures Sheet summarizes all of the actual program costs from 1981 through 1996. Also included were the budgeted expenditures for FY 96-97 and 97-98. This information was reviewed with the Committee to provide background and reference for development of the baseline program after year 2000.

Current Program Cash Flow

This cash flow represents a continuation of the current program through the year 2010. It assumes reduced revenues due to the benefit assessment sunset, maintaining the current level of service for operations and maintenance (including mitigation costs), and a continuation of the current capital improvement program. A review of the cash flow indicates the zone will not be able to maintain adequate operating reserves as early as FY 01-02 if the current program expenditures continue. Additionally, insufficient revenues exist starting in FY 99-00 to cover projected annual operating outlays. The zone's remaining debt capacity of $27 million was not utilized in this cash flow.

Baseline Program Level of Service

The Level of Service Worksheet provides a basis for determining the baseline program. A review of the worksheet indicates that the projected annual revenue of $5.6 million (less debt service) after year 2000 will only support a program of Level of Service E. With this level of service only District-owned improved facilities are maintained at the current level.

Baseline Program Cash Flow

The Baseline Program Cash Flow lays out a fundable operating program and capital construction program which utilizes the $27 million remaining debt capacity. This cash flow assumes a reduced level of service

for operations and maintenance and is consistent with the Baseline Capital Improvement Strategy described in detail below.

Baseline Capital Improvement Strategy

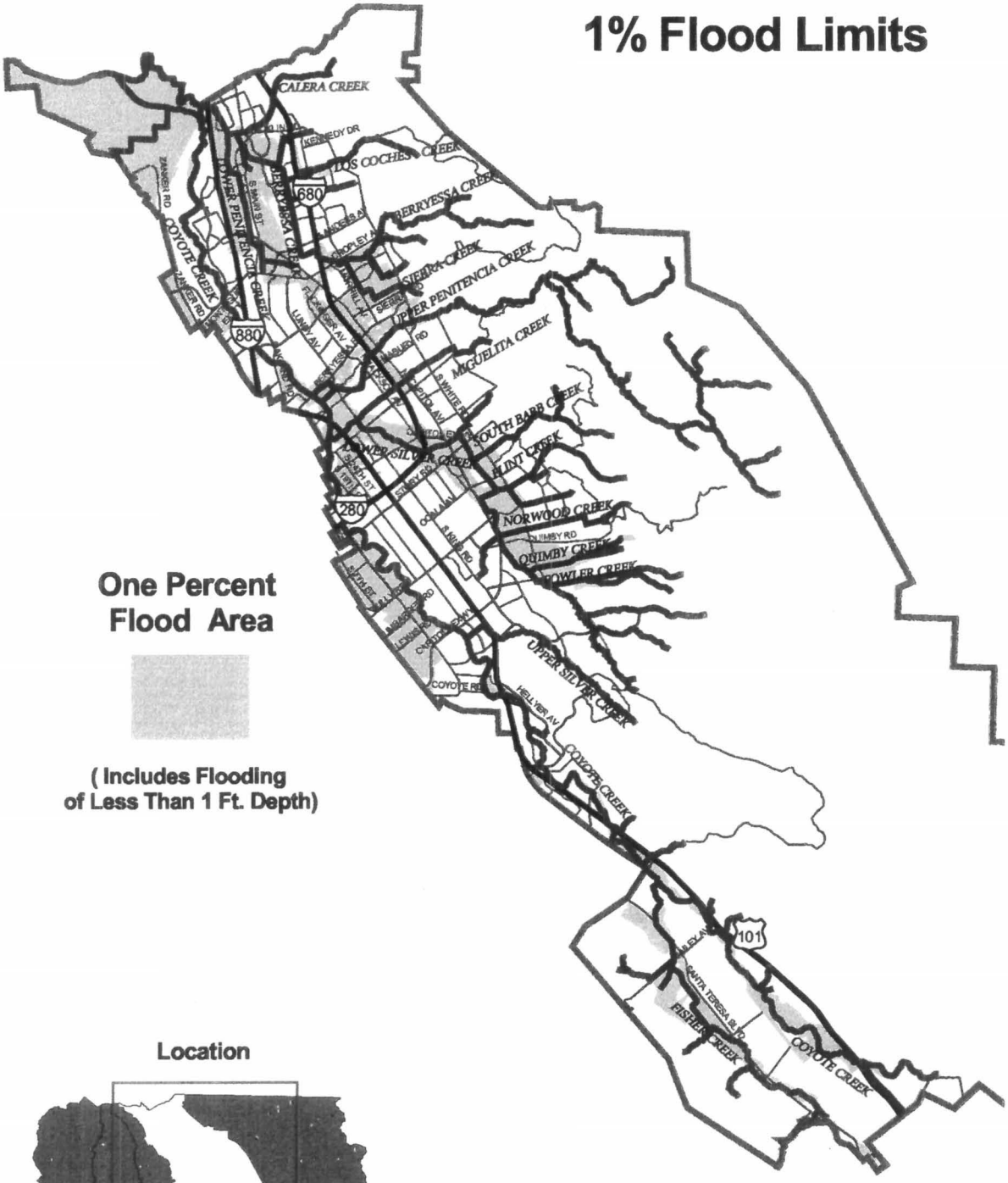
It is recommended that the East Zone issue the authorized $27 million debt in order to continue funding design and construction of the highest priority projects: Coyote Creek (Bay to Montague), Lower Silver Creek, and Berryessa Creek. In addition, continuing to work with the Corps to expedite the Upper Penitencia Creek design work and the Berryessa Creek draft feasibility study should remain priorities.

Outstanding subventions claims for expenditures from the Coyote and Lower Silver Creeks projects in the amount of $14.6 million should continue to be actively pursued. In addition, continuing to pursue funding of the subventions program to ensure reimbursement of claims should remain a priority.

In summary the strategy is to:

- Issue authorized $27 million new debt
- Plan and construct highest priority capital projects.
  - Lower Silver Creek Project
  - Berryessa Creek Project
- Continue working with Corps to expedite:
  - Berryessa Creek Project.
  - Upper Penitencia Creek Project

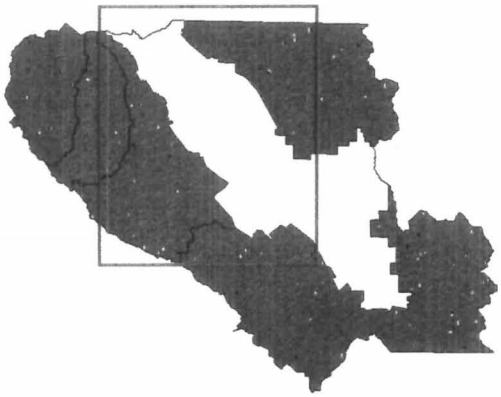
East Zone
1% Flood Limits



One Percent Flood Area

(Includes Flooding of Less Than 1 Ft. Depth)

Location



N

Not to Scale

Figure 5-1

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686

TABLE 5-1

FUNDED PROJECTS IDENTIFIED IN THE DRAFT 1998-99 CIP
($ Millions)

Lower Silver Creek	$ 37.9
Berryessa Creek	$ 41.1
Coyote Creek (SF Bay to Montague) - Corps	$ 1.9
TOTAL	**$ 80.9**

UNFUNDED PROJECTS
($ Millions)

Upper Penitencia Creek	$ 34.0
Coyote Creek (Montague to Anderson Dam)	not available
Fisher Creek	not available
South Babb Creek	not available
Los Coches Creek	not available
Calera Creek	not available
Thompson Creek	not available
Yerba Buena Creek	not available
TOTAL 〉	**$ 34.0**

*** THIS IS A PARTIAL LIST OF REMAINING PROJECTS**

EAST FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 5-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
I. DEBT SERVICE	$ 350	$ -	$ 3,149	$ 1,907	$ 1,906
II. MAINTENANCE					
1) Sediment and Silt Removal	$ 1,714	$ 686	$ 405	$ -	$ -
2) Erosion Prevention and Repair	$ 495	$ 229	$ 373	$ -	$ -
3) Vegetation and Weed Abatement	$ 1,285	$ 1,310	$ 2,775	$ -	$ -
4) Property and Appurtenances Maintenance	$ 431	$ 478	$ 794	$ -	$ -
5) Trash and Debris Removal	$ -	$ 180	$ 289	$ -	$ -
6) Graffiti Removal	$ -	$ 3	$ 18	$ -	$ -
7) Fencing and Signage	$ -	$ 162	$ 267	$ -	$ -
8) General Maint./Engineering/Administrative Staffing	$ 990	$ 516	$ 515	$ 1,620	$ 1,816
9) Levee Maintenance	$ 188	$ -	$ 370	$ -	$ -
10) Maintenance Warehouse	$ -	$ -	$ 260	$ 263	$ 240
11) Hazmat Investigation, Removal and Disposal	$ 2	$ -	$ 73	$ 51	$ 66
Subtotal	**$ 5,105**	**$ 3,564**	**$ 6,139**	**$ 1,934**	**$ 2,122**
III. EMERGENCY SERVICES					
1) Flood Awareness Program	$ -	$ -	$ 3	$ 92	$ 112
2) Emergency Operation Center	$ 349	$ 568	$ 272	$ 56	$ 45
3) Sandbag Work	$ -	$ -	$ 20	$ -	$ 40
Subtotal	**$ 349**	**$ 568**	**$ 295**	**$ 148**	**$ 197**
IV. LAND USE REVIEW	**$ 641**	**$ 714**	**$ 1,295**	**$ 406**	**$ 459**
V. OPERATING PROJECTS					
1) Flood Insurance Liaison Study	$ -	$ -	$ 101	$ 12	$ 48
2) Waterways Management Planning Study	$ 169	$ 104	$ 124	$ 282	$ -
3) Automated Mapping/GIS	$ -	$ -	$ 69	$ 32	$ 46
4) Watershed Management Coordination Project	$ -	$ -	$ 11	$ 40	$ 17
5) San Francisco Bay Shoreline Study	$ 1	$ 2	$ -	$ -	$ -
6) Nonpoint Source (Program & District Costs)	$ -	$ -	$ 855	$ 118	$ 134
7) Environmental	$ -	$ 2	$ 63	$ 84	$ 212
a. Fisheries Management Plan	$ -	$ -	$ -	$ -	$ -
b. Stream Resource Inventory	$ -	$ -	$ 7	$ 40	$ 74
c. Water Quality	$ -	$ -	$ 37	$ -	$ -
d. Fish Passage	$ -	$ -	$ -	$ -	$ -
e. Regulatory Agency Permit Coordination	$ -	$ 2	$ 19	$ 39	$ 23
f. Red-Legged Frog Habitat Plan	$ -	$ -	$ -	$ 5	$ 40
g. Environmental Strategy	$ -	$ -	$ -	$ -	$ 75
8) Sedimentation Study	$ 3	$ -	$ -	$ -	$ -
9) Solid Waste Management Study	$ -	$ 2	$ 8	$ -	$ 60
10) Maintenance Guidelines	$ -	$ 2	$ 46	$ -	$ -
11) Maintenance Program EIR	$ -	$ -	$ 430	$ 90	$ 191
12) Environmental Policy Development	$ -	$ -	$ -	$ 53	$ -
13) Comprehensive Flood Management Project	$ -	$ -	$ -	$ -	$ 130
14) Water Resource Integration/Coordination	$ -	$ -	$ -	$ 29	$ 13
15) Regional Board Watershed Initiative	$ -	$ -	$ -	$ -	$ 36
16) Stream Water Use Communication	$ -	$ -	$ -	$ -	$ 30
Subtotal	**$ 173**	**$ 112**	**$ 1,707**	**$ 740**	**$ 917**

EAST FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 5-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
VI. ADMINISTRATIVE					
1) Administrative	$ 254	$ 919	$ 2,042	$ 415	$ 276
a. Risk Management	$ 115	$ 640	$ 1,498	$ 306	$ 271
b. Auditing	$ -	$ 5	$ 33	$ 8	$ 5
c. Cost Center Support Project	$ 139	$ 274	$ 511	$ 101	$ -
2) Benefit Assessment Management	$ 26	$ 91	$ 173	$ 186	$ 142
3) Engineering Support	$ 382	$ 372	$ 559	$ 243	$ 263
a. Basic Engineering	$ 382	$ 372	$ 73	$ 8	$ 32
b. Hydrologic Data Management	$ -	$ -	$ 472	$ 227	$ 223
c. Cross Valley Level and Benchmark	$ -	$ -	$ 14	$ 8	$ 8
Subtotal	**$ 662**	**$ 1,382**	**$ 2,774**	**$ 844**	**$ 681**
VII. CAPITAL IMPROVEMENT PROJECTS					
1) Coyote Creek	$ 13	$ 14,934	$ 44,985	$ 776	$ 1,358
2) Wrigley-Ford Creek	$ -	$ 575	$ 2,698	$ -	$ -
3) Berryessa Creek	$ 76	$ 34	$ 902	$ 327	$ -
4) Lower Silver Creek	$ 1,104	$ 749	$ 2,277	$ -	$ 1,158
5) Upper Silver Creek	$ -	$ -	$ 197	$ -	$ -
6) Lower Penitencia Creek	$ 5,127	$ 206	$ 133	$ 369	$ -
7) Upper Penitencia Creek	$ 100	$ 313	$ 114	$ 458	$ 739
8) Thompson Creek	$ 28	$ 765	$ 36	$ -	$ -
9) Ruby Creek	$ 3	$ -	$ -	$ -	$ -
10) East Penitencia Creek	$ -	$ -	$ 45	$ -	$ -
11) Calera Creek	$ -	$ -	$ -	$ -	$ 129
Subtotal	**$ 6,451**	**$ 17,576**	**$ 51,387**	**$ 1,930**	**$ 3,384**
TOTAL	**$ 13,731**	**$ 23,916**	**$ 66,746**	**$ 7,909**	**$ 9,666**

East Zone Cash Flow Projection
Current Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**31,859**	**36,437**	**35,302**	**25,433**	**12,545**	**8,589**	**4,353**	**(180)**	**(5,029)**	**(9,934)**	**(14,908)**	**(19,951)**	**(23,033)**
Revenue Sources													
Property Tax	4,110	4,192	4,276	4,362	4,449	4,538	4,629	4,721	4,816	4,912	5,010	5,110	5,212
Benefit Assessment (Exist. Debt.)	5,590	5,702	5,816	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382
Interest	2,019	2,276	2,219	1,584	878	663	432	185	198	201	203	206	209
Cap. Reimb./Subven./Other	2,390	830	-										
TOTAL	**14,109**	**13,000**	**12,311**	**8,328**	**7,709**	**7,583**	**7,443**	**7,289**	**7,395**	**7,494**	**7,595**	**7,698**	**7,803**
Operating Outlays													
Debt Service (Exist. Debt)	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906
Maintenance	2,122	3,142	4,162	5,182	5,286	5,391	5,499	5,609	5,721	5,836	5,952	6,072	6,193
Mitigation for Maintenance Activities		2,033	2,033	2,033	2,033	2,033	2,033	2,033	2,033	2,033	2,033		
All Other Operations Costs	2,254	2,299	2,345	2,392	2,440	2,489	2,538	2,589	2,641	2,694	2,748	2,803	2,859
TOTAL	**6,282**	**9,380**	**10,446**	**11,513**	**11,664**	**11,819**	**11,976**	**12,137**	**12,301**	**12,468**	**12,639**	**10,780**	**10,957**
Balance Available for Capital & Reserves	**39,687**	**40,057**	**37,167**	**22,248**	**8,589**	**4,353**	**(180)**	**(5,029)**	**(9,934)**	**(14,908)**	**(19,951)**	**(23,033)**	**(26,187)**
Capital Appropriations													
Automated Mapping/GIS	46	46											
Berryessa Cr - Calaveras/Old Piedmont		250	255	3,880	2,358	20,825	13,518						
Calera Creek Berryessa/Hwy 680	129	35											
Coyote Creek	1,277	970	1,408	1,647	2,036	1,130	1,877	45	46	185			
Lower Silver Creek	1,059	2,962	9,361	3,888	6,470	4,202	3,142	2,478	3,676	703			
Upper Penitencia Cr Corps (Planning)	739	492	711	166	-	-	-	-	-	-			
Thompson Creek Fish Ladder		-	-	122	471	-							
(Shaded area represents un-funded CIP) **TOTAL**	**3,250**	**4,755**	**11,734**	**9,703**	**11,336**	**26,157**	**18,538**	**2,523**	**3,722**	**888**	**-**	**-**	
Balance Available after CIP	**36,437**	**35,302**	**25,433**	**12,545**	**8,589**	**4,353**	**(180)**	**(5,029)**	**(9,934)**	**(14,908)**	**(19,951)**	**(23,033)**	**(26,187)**
Required Operating Reserves (50% of operating outlays)	3,141	4,690	5,223	5,756	5,832	5,909	5,988	6,069	6,150	6,234	6,319	5,390	5,479
Available Operating Reserves	3,141	4,690	5,223	5,756	5,832	4,353	-	-	-	-	-	-	-
Capital Reserves	33,296	30,612	20,210	6,789	2,757	-	-	-	-	-	-	-	-
TOTAL RESERVES	**36,437**	**35,302**	**25,433**	**12,545**	**8,589**	**4,353**	**(180)**	**(5,029)**	**(9,934)**	**(14,908)**	**(19,951)**	**(23,033)**	**(26,187)**

Available Debt Capacity 27,000

Current Program Assumptions

1) Continue to provide current level of service for operations and maintenance. Maintenance and mitigation cost projections based on Administrative Draft Maintenance EIR and regulatory agencies' requirements for routine work.
2) 1997-98 beginning reserve balance from the FY 1996-97 audited financial statement.
3) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year.
4) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
5) Non-maintenance operating costs will increase at 2% per year.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.

Table 5-3

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- East Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
MANDATED FUNCTIONS								
1) Creek Maintenance per Agreement w/ other agencies including maintenance of revegetation sites per permit requirements and activities required per court order/litigation.		$ 220	$ 220	$ 220	$ 220	$ 220	$ 220	$ 220
MAINTENANCE								
1) Channel Maintenance*		$ 322	$ 4,151	$ 6,812	$ 6,812	$ 6,812	$ 6,812	$ 4,025
a. Sediment and Silt Removal	$ -		*$ 1,598*	*$ 1,776*	*$ 1,776*	*$ 1,776*	*$ 1,776*	
b. Erosion Prevention and Repair	$ -		*$ 131*	*$ 1,314*	*$ 1,314*	*$ 1,314*	*$ 1,314*	
c. Vegetation and Weed Abatement	$ -		*$ 1,182*	*$ 1,689*	*$ 1,689*	*$ 1,689*	*$ 1,689*	
d. Mitigation for Channel Maintenance Activities		*$ 143*	*$ 1,240*	*$ 2,033*	*$ 2,033*	*$ 2,033*	*$ 2,033*	
2) Property and Appurtenances Maintenance	$ -		$ 120	$ 160	$ 200	$ 240	$ 280	$ 120
3) Trash and Debris Removal	$ -		$ 30	$ 40	$ 50	$ 60	$ 70	$ 30
4) Graffiti Removal	$ -		$ 1	$ 2	$ 3	$ 4	$ 5	$ 1
5) Fencing and Signage	$ -		$ 30	$ 40	$ 50	$ 60	$ 70	$ 30
6) General Maintenance/Engineering/Administrative Staffing	$ 1,816	$ 40	$ 60	$ 80	$ 100	$ 120	$ 140	$ 60
7) Maintenance Warehouse	$ 240		$ 144	$ 192	$ 240	$ 288	$ 336	$ 144
8) Hazmat Investigation, Removal, and Disposal	$ 66		$ 40	$ 53	$ 66	$ 80	$ 92	$ 40
Subtotal	**$ 2,122**	**$ 403**	**$ 4,576**	**$ 7,379**	**$ 7,521**	**$ 7,664**	**$ 7,805**	**$ 4,450**
*Includes $220 thousand in mandated functions								
EMERGENCY SERVICES								
1) Flood Awareness Program	$ 112		$ 69	$ 92	$ 115	$ 138	$ 161	$ 92
2) Emergency Operation Center	$ 45		$ 27	$ 36	$ 45	$ 54	$ 63	$ 36
3) Sandbag Work	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	$ 32
Subtotal	**$ 197**	**$ -**	**$ 120**	**$ 160**	**$ 200**	**$ 240**	**$ 280**	**$ 160**
LAND USE REVIEW	**$ 459**		**$ 264**	**$ 352**	**$ 440**	**$ 528**	**$ 616**	**$ 264**

Table 5-4

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- East Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 (Budgeted)	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
OPERATING PROJECTS								
1) Flood Insurance Liaison Study	$ 48			$ 40	$ 50	$ 60	$ 70	$ 40
2) Waterways Management Planning Study	$ -				$ 100	$ 120	$ 140	
3) Automated Mapping/GIS	$ 46					$ 500	$ 60	
4) Watershed Management Coordination Project	$ 17						$ 20	
5) San Francisco Bay Shoreline Study	$ -							
6) Nonpoint Source	$ 134						$ 135	
7) Environmental								
a. Fisheries Management Plan								
b. Stream Resource Inventory	$ 74						$ 75	
c. Water Quality	$ -							
d. Fish Passage								
e. Regulatory Agency Permit Coordination	$ 23		$ 15	$ 20	$ 25	$ 30	$ 35	$ 20
f. Red Legged Frog Habitat Plan/ ESA	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	$ 32
g. Environmental Strategy	$ 75						$ 75	
8) Sedimentation Study	$ -							
9) Solid Waste Management Study	$ 60				$ 60	$ 60	$ 60	$ 50
10) Maintenance Guidelines								
11) Maintenance Program EIR	$ 191		$ 200	$ 200	$ 200	$ 200	$ 200	$ 150
12) Environmental Policy Development	$ -							
13) Comprehensive Flood Management Project	$ 130							
14) Water Resource Integration/Coordination	$ 13						$ 15	
15) Regional Board Watershed Initiative	$ 36						$ 40	
16) Stream Water Use Communication	$ 30						$ 30	
Subtotal	**$ 917**	**$ -**	**$ 239**	**$ 292**	**$ 475**	**$ 1,018**	**$ 1,011**	**$ 292**
ADMINISTRATIVE								
1) Administrative	$ 276	$ 112	$ 168	$ 224	$ 280	$ 198	$ 231	$ 168
2) Benefit Assessment Management	$ 142		$ 87	$ 116	$ 145	$ 156	$ 182	$ 87
3) Engineering Support	$ 263	$ 104	$ 156	$ 208	$ 260	$ 312	$ 364	$ 156
Subtotal	**$ 681**	**$ 216**	**$ 411**	**$ 548**	**$ 685**	**$ 666**	**$ 777**	**$ 411**
TOTAL	**$ 4,376**	**$ 619**	**$ 5,610**	**$ 8,731**	**$ 9,321**	**$ 10,116**	**$ 10,489**	**$ 5,577**

PROJECTED ANNUAL REVENUE AFTER YEAR 2000 [1] **$ 5,577**

1. Revenue projection assumes: Issuance of maximum available debt by FY 2000, Property tax will increase at 2% per year, Benefit Assessment will decrease to 1.25 times debt service, Annual interest revenue is calculated at 5.5% for 6 months (excludes interest on capital reserves), Debt service has been deducted to show available annual revenue.

Table 5-4

East Zone Cash Flow Projections
Baseline Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**31,859**	**36,437**	**38,723**	**60,524**	**55,755**	**49,661**	**27,134**	**11,751**	**9,718**	**6,350**	**5,255**	**5,022**	**4,762**
Revenue Sources													
Property Tax	4,110	4,192	4,276	4,362	4,449	4,538	4,629	4,721	4,816	4,912	5,010	5,110	5,212
Benefit Assessment (Exist. Debt.)	5,590	5,702	5,816	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382	2,382
Benefit Assessment (New Debt.)				2,428	2,428	2,428	2,428	2,428	2,428	2,428	2,428	2,428	2,428
Interest	2,019	2,276	2,407	3,581	3,321	2,988	1,752	908	799	267	270	273	276
Cap. Reimb./Subven./Other *	2,390	830	-										
TOTAL	**14,109**	**13,000**	**12,499**	**12,753**	**12,580**	**12,336**	**11,191**	**10,440**	**10,425**	**9,989**	**10,090**	**10,193**	**10,298**
Operating Outlays													
Debt Service (Exist. Debt)	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906	1,906
Debt Service (New Debt)				1,943	1,943	1,943	1,943	1,943	1,943	1,943	1,943	1,943	1,943
Maintenance (includes mitigation for maint.)	2,122	2,898	3,674	4,450	4,539	4,630	4,722	4,817	4,913	5,011	5,112	5,214	5,318
All Other Operations Costs	2,254	1,975	1,695	1,187	1,211	1,235	1,260	1,285	1,311	1,337	1,363	1,391	1,419
TOTAL	**6,282**	**6,779**	**7,275**	**9,485**	**9,598**	**9,713**	**9,830**	**9,950**	**10,072**	**10,196**	**10,323**	**10,453**	**10,585**
Balance Available for Capital & Reserves	**39,687**	**42,658**	**43,948**	**63,792**	**58,738**	**52,285**	**28,494**	**12,241**	**10,071**	**6,143**	**5,022**	**4,762**	**4,475**
Capital Appropriations													
Automated Mapping/GIS	46	46											
Berryessa Creek Calaveras/Old Piedmont		250	255	3,880	2,358	20,825	13,518						
Calera Creek Berryessa/Hwy 680	129												
Coyote Creek	1,277	185	97	102	248	123	83	45	46	185			
Lower Silver Creek	1,059	2,962	9,361	3,888	6,470	4,202	3,142	2,478	3,676	703			
Upper Penitencia Creek Corps (Planning)	739	492	711	166	-	-	-	-	-	-			
TOTAL	**3,250**	**3,935**	**10,423**	**8,037**	**9,077**	**25,150**	**16,743**	**2,523**	**3,722**	**888**	**-**	**-**	
Balance Available after CIP	**36,437**	**38,723**	**33,524**	**55,755**	**49,661**	**27,134**	**11,751**	**9,718**	**6,350**	**5,255**	**5,022**	**4,762**	**4,475**
Required Operating Reserves (50% of operating outlays)	3,141	3,389	3,637	4,743	4,799	4,856	4,915	4,975	5,036	5,098	5,162	5,226	5,292
Available Operating Reserves	3,141	3,389	3,637	4,743	4,799	4,856	4,915	4,975	5,036	5,098	5,022	4,762	4,475
Capital Reserves	33,296	35,334	29,887	51,013	44,862	22,278	6,836	4,743	1,314	156	-	-	-
TOTAL RESERVES	**36,437**	**38,723**	**33,524**	**55,755**	**49,661**	**27,134**	**11,751**	**9,718**	**6,350**	**5,255**	**5,022**	**4,762**	**4,475**
Issue New Certificates of Participation			**27,000**										

*Includes repayment of North Central Zone loan

Baseline Program Assumptions

1) 1997-98 beginning reserve balance if from the FY 1996-97 audited financial statement.
2) Utilize available remaining debt capacity by 6/2000 to finance Capital Program.
3) Level of Service for maintenance and operations reduced to a level that can be supported by available annual operating revenue.
4) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year and modified to reflect the baseline strategy.
5) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.
8) Maintenance and operations costs will increase at 2% per year after FY 00/01.

Table 5-5

CHAPTER 6
SOUTH FLOOD CONTROL ZONE

This chapter provides background information developed for the South Zone and reviewed with the Zone Advisory Committee to create a baseline program. The following information is provided in this chapter:

- Zone Map showing the Remaining One Percent Flood Area (Figure 6-1)
- Partial List of Remaining Capital Projects (Table 6-1)
- Historical Program Expenditures Summary Sheet (Table 6-2)
- Current Cash Flow Projection (Table 6-3)
- Level of Service Worksheet and Proposed Year 2000 Budget (Table 6-4)
- Baseline Cash Flow Projection (Table 6-5)

This zone includes portions of the City of Morgan Hill and the City of Gilroy. It covers the tributaries and sub-watersheds of the Pajaro River which drain south to Monterey Bay, including Llagas and Uvas Creeks. Figure 6-1 shows a map of the zone and indicates the areas currently subject to flooding from a 1 percent flood. Since 1982, portions of Uvas and Llagas Creeks have been constructed and this flood map reflects some of the work completed to date. Table 6-1 is a partial list of the remaining capital projects which will address the remaining flood hazard in the zone.

The Historical Program Expenditures Sheet summarizes all of the actual program costs from 1981 through 1996. Also included were the budgeted expenditures for FY 96-97 and 97-98. This information was reviewed with the Committee to provide background and reference for development of the baseline program after year 2000.

Current Program Cash Flow

This cash flow represents a continuation of the current program through the year 2010. It assumes reduced revenues due to the benefit assessment sunset, maintaining the current level of service for operations and maintenance (including mitigation costs), and a continuation of the current capital improvement program. A review of the cash flow indicates the zone will not be able to maintain adequate operating reserves as early as FY 98-99 if the current program expenditures continue. Additionally, insufficient revenues exist starting in FY 97-98 to cover projected annual operating outlays.

Baseline Program Level of Service

The Level of Service Worksheet provides a basis for determining the baseline program. A review of the worksheet indicates that the projected annual revenue of $1.0 million (less debt service) after year 2000 will only support a program between Level of Service E and F. With this level of service only mandated and essential services are performed and a small portion of District-owned improved facilities are maintained at the current level.

Baseline Program Cash Flow

The Baseline Program Cash Flow lays out a fundable operating program and *minimum* capital construction program. This cash flow assumes a reduced level of service for operations and maintenance and is consistent with the Baseline Capital Improvement Strategy described in below.

Baseline Capital Improvement Strategy

No additional debt capacity remains in the South Zone. It is recommended that priority in the South Zone should be given to continuing to work with the Army Corps and NRCS to expedite construction of the Llagas Creek PL-566 Project.

Outstanding subventions claims for expenditures from the Llagas and Pajaro Creeks projects in the amount of $4.0 million should continue to be actively pursued. In addition, continuing to pursue future funding of the subventions program to ensure reimbursement of claims should remain a priority.

In summary the strategy is:

- No existing debt capacity
- Continue working with Corps and NRCS to expedite Llagas Creek PL-566 Project

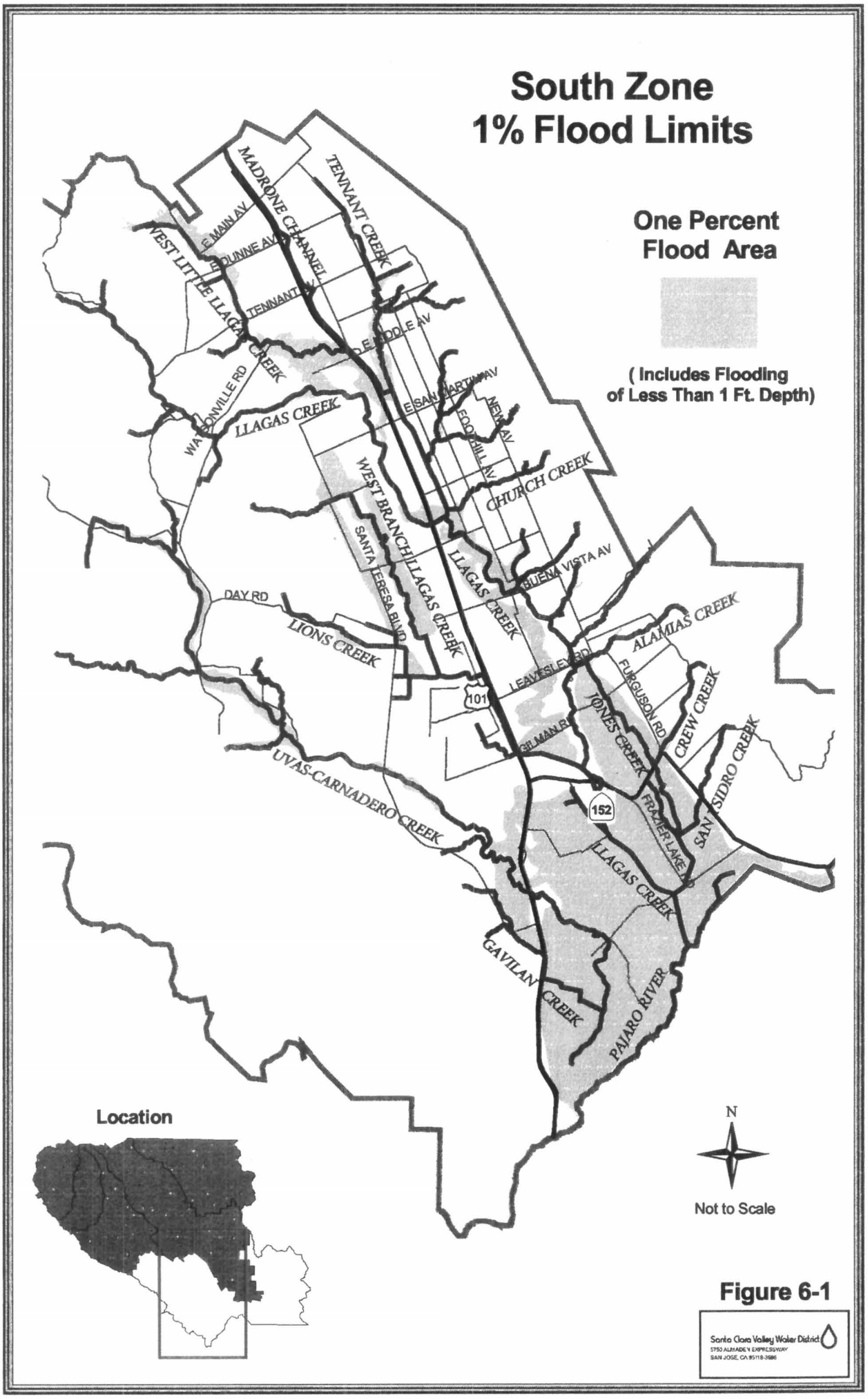


Figure 6-1

Santa Clara Valley Water District
5750 ALMADEN EXPRESSWAY
SAN JOSE, CA 95118-3686

IDENTIFIED REMAINING CAPITAL PROJECTS *
SOUTH ZONE

TABLE 6-1

FUNDED PROJECTS IDENTIFIED IN THE DRAFT 1998-99 CIP
($ Millions)

Lower Llagas Creek (PL 566)	$	0.3
TOTAL	**$**	**0.3**

UNFUNDED PROJECTS
($ Millions)

Uvas Creek - Corps (Uvas-Carnardero)	$	14.7
Upper Llagas Creek	$	14.6
Tennant Creek	$	3.5
Jones Creek	$	4.1
Dexter Creek	not available	
Llagas Creek (Santa Teresa to Chesbro Reservoir)	$	16.4
TOTAL 〉	**$**	**53.3**

*** THIS IS A PARTIAL LIST OF REMAINING PROJECTS**

SOUTH FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 6-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
I. DEBT SERVICE	$ 76	$ 4,431	$ 3,768	$ 612	$ 610
II. MAINTENANCE					
1) Sediment and Silt Removal	$ 335	$ 105	$ 5	$ -	$ -
2) Erosion Prevention and Repair	$ 186	$ 229	$ 6	$ -	$ -
3) Vegetation and Weed Abatement	$ 597	$ 885	$ 451	$ -	$ -
4) Property and Appurtenances Maintenance	$ 252	$ 189	$ 254	$ -	$ -
5) Trash and Debris Removal	$ -	$ 34	$ 73	$ -	$ -
6) Graffiti Removal	$ -	$ -	$ 5	$ -	$ -
7) Fencing and Signage	$ -	$ 27	$ 96	$ -	$ -
8) General Maint./Engineering/Administrative Staffing	$ 309	$ 1,817	$ 2,704	$ 1,093	$ 1,316
9) Levee Maintenance	$ 28	$ 68	$ -	$ -	$ -
10) Maintenance Warehouse	$ -	$ -	$ 87	$ 55	$ 80
11) Hazmat Investigation, Removal and Disposal	$ -	$ 2	$ 138	$ 47	$ 57
Subtotal	**$ 1,707**	**$ 3,356**	**$ 3,819**	**$ 1,195**	**$ 1,453**
III. EMERGENCY SERVICES					
1) Flood Awareness Program	$ -	$ -	$ 1	$ 22	27
2) Emergency Operation Center	$ 80	$ 418	$ 104	$ 19	15
3) Sandbag Work	$ -	$ -	$ 5	$ -	40
Subtotal	**$ 80**	**$ 418**	**$ 110**	**$ 41**	**$ 82**
IV. LAND USE REVIEW	**$ 431**	**$ 625**	**$ 976**	**$ 317**	**$ 366**
V. OPERATING PROJECTS					
1) Flood Insurance Liaison Study	$ -	$ -	$ 150	$ 3	$ 10
2) Waterways Management Planning Study	$ 78	$ 145	$ 121	$ 282	$ -
3) Automated Mapping/GIS	$ -	$ 1	$ 69	$ 32	$ 46
4) Watershed Management Coordination Project	$ -	$ -	$ -	$ -	$ 17
5) Pajaro River COE Study	$ 47	$ 9	$ -	$ -	$ -
6) Nonpoint Source	$ -	$ -	$ -	$ -	$ -
7) Environmental	$ -	$ 2	$ 6	$ 18	$ 123
a. Fisheries Management Plan	$ -	$ -	$ -	$ -	$ -
b. Stream Resource Inventory	$ -	$ -	$ -	$ -	$ -
c. Water Quality	$ -	$ -	$ -	$ -	$ -
d. Fish Passage	$ -	$ -	$ -	$ -	$ -
e. Regulatory Agency Permit Coordination	$ -	$ 2	$ 6	$ 13	$ 8
f. Red-Legged Frog Habitat Plan	$ -	$ -	$ -	$ 5	$ 40
g. Environmental Strategy	$ -	$ -	$ -	$ -	$ 75
8) Sedimentation Study	$ -	$ -	$ -	$ -	$ -
9) Solid Waste Management Study	$ 2	$ 2	$ 5	$ -	$ 18
10) Maintenance Guidelines	$ -	$ -	$ -	$ -	$ -
11) Maintenance Program EIR	$ -	$ -	$ 199	$ 119	$ 255
12) Environmental Policy Development	$ -	$ -	$ -	$ 53	$ -
13) Comprehensive Flood Management Project	$ -	$ -	$ -	$ -	$ 130
14) Water Resource Integration/Coordination	$ -	$ -	$ -	$ 29	$ 13
15) Regional Board Watershed Initiative	$ -	$ -	$ -	$ -	$ -
16) Stream Water Use Communication	$ -	$ -	$ -	$ -	$ 30
Subtotal	**$ 127**	**$ 159**	**$ 550**	**$ 536**	**$ 642**

SOUTH FLOOD CONTROL PROGRAM
HISTORICAL EXPENDITURE SUMMARY
($ Thousands)

TABLE 6-2

EXPENDITURE CATEGORIES	ACTUAL EXPENDITURES 81 - 86	86 - 91	91 - 96	BUDGETED EXPENDITURES 96 - 97	97 - 98
VI. ADMINISTRATIVE					
1) Administrative	$ 229	$ 833	$ 977	$ 180	$ 115
a. Risk Management	$ 93	$ 480	$ 584	$ 127	$ 113
b. Auditing	$ -	$ 7	$ 13	$ 2	$ 2
c. Cost Center Support Project	$ 136	$ 346	$ 380	$ 51	$ -
2) Benefit Assessment Management	$ 5	$ 30	$ 56	$ 67	$ 51
3) Engineering Support	$ 97	$ 137	$ 201	$ 82	$ 88
a. Basic Engineering	$ 97	$ 137	$ 41	$ 3	$ 11
b. Hydrologic Data Management	$ -	$ -	$ 156	$ 76	$ 74
c. Cross Valley Level and Benchmark	$ -	$ -	$ 4	$ 3	$ 3
Subtotal	**$ 331**	**$ 1,000**	**$ 1,234**	**$ 329**	**$ 254**
VII. CAPITAL IMPROVEMENT PROJECTS					
1) Jones Creek	$ 20	$ -	$ -	$ -	$ -
2) Tennant Creek	$ 67	$ 11	$ -	$ -	$ -
3) PL - 566 (Lower)	$ 24	$ 34	$ 55	$ -	$ -
4) PL - 566 (Upper)	$ 138	$ 159	$ 396	$ -	$ -
5) Uvas-Carnadero Creek	$ 76	$ 11,978	$ 591	$ -	$ -
6) Lower Llagas Creek	$ 4,384	$ 7,620	$ 2,238	$ 386	271
7) Upper Llagas Creek	$ 269	$ 6,648	$ 2,137	$ 472	685
8) Lions Creek	$ 2	$ -	$ 661	$ -	$ -
Subtotal	**$ 4,980**	**$ 26,450**	**$ 6,078**	**$ 858**	**$ 956**
TOTAL	**$ 7,732**	**$ 36,439**	**$ 16,535**	**$ 3,888**	**$ 4,363**

South Zone Cash Flow Projection
Current Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projected 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**4,662**	**3,210**	**1,132**	**(1,514)**	**(5,964)**	**(10,481)**	**(15,069)**	**(19,728)**	**(24,460)**	**(29,267)**	**(34,149)**	**(39,108)**	**(44,146)**
Revenues													
Property Tax	736	751	766	781	797	813	829	845	862	880	897	915	933
Benefit Assessment	1,990	2,030	2,070	762	762	762	762	762	762	762	762	762	762
Interest*	331	253	140	42	43	43	44	44	45	45	46	46	47
TOTAL	**3,057**	**3,034**	**2,976**	**1,586**	**1,602**	**1,618**	**1,635**	**1,652**	**1,670**	**1,687**	**1,705**	**1,724**	**1,743**
Operating Outlays													
Debt Service	610	610	610	610	610	610	610	610	610	610	610	610	610
Maintenance	1,453	1,937	2,422	2,806	2,862	2,919	2,978	3,037	3,098	3,160	3,223	3,288	3,353
Mitigation		1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193	1,193
All Other Operations Costs	1,344	1,371	1,398	1,426	1,455	1,484	1,514	1,544	1,575	1,606	1,638	1,671	1,705
TOTAL	**3,407**	**5,111**	**5,623**	**6,035**	**6,120**	**6,206**	**6,294**	**6,384**	**6,476**	**6,569**	**6,665**	**6,762**	**6,861**
Balance Available for Capital & Reserves	**4,312**	**1,132**	**(1,514)**	**(5,964)**	**(10,481)**	**(15,069)**	**(19,728)**	**(24,460)**	**(29,267)**	**(34,149)**	**(39,108)**	**(44,146)**	**(49,264)**
Capital Appropriations													
Automated Mapping/GIS	46	46											
Upper Llagas Creek - Reimbursable	655	3,332	1,022	1,401	925	1,252	952	1,528	1,002	2,059	-		
Upper Llagas Creek - Non-Reimbursable	130	20	20	21	21	22	-	-	-	-			
Lower Llagas Creek - Reimbursable	187	56	-	-	-	-	-	-	-	-			
Lower Llagas Creek - Non-Reimbursable	84	12	-	-	-	-	-	-	-	-			
(Shaded area represents un-funded CIP) **TOTAL**	**1,102**	**3,466**	**1,042**	**1,422**	**947**	**1,274**	**952**	**1,528**	**1,002**	**2,059**	**-**	**-**	**-**
Balance Available after CIP	**3,210**	**1,132**	**(1,514)**	**(5,964)**	**(10,481)**	**(15,069)**	**(19,728)**	**(24,460)**	**(29,267)**	**(34,149)**	**(39,108)**	**(44,146)**	**(49,264)**
Reserves													
Required Operating Reserves (50% of operating outlays)	1,703	2,556	2,811	3,018	3,060	3,103	3,147	3,192	3,238	3,285	3,332	3,381	3,430
Available Operating Reserves	1,703	1,132	-	-	-	-	-	-	-	-	-	-	-
Capital Reserves	1,506	-	-	-	-	-	-	-	-	-	-	-	-
Total Available Reserves	**3,210**	**1,132**	**(1,514)**	**(5,964)**	**(10,481)**	**(15,069)**	**(19,728)**	**(24,460)**	**(29,267)**	**(34,149)**	**(39,108)**	**(44,146)**	**(49,264)**
Restricted Reserves													
Held for Outstanding DWR Claims	**3,593**	**3,593**	**3,593**										

* Includes interest earned on restricted reserves

Current Program Assumptions

1) Continue to provide current level of service for operations and maintenance. Maintenance and mitigation cost projections based on Administrative Draft Maintenance EIR and regulatory agencies' requirements for routine work.
2) 1997-98 beginning reserve balance from the FY 1996-97 audited financial statement.
3) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year.
4) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
5) Non-maintenance operating costs will increase at 2% per year.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- South Zone

($ Thousands)

EXPENDITURE CATEGORIES	97-98 Budgeted	BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE) F	E	D	C	B	A	Proposed Budget 00-01
MANDATED FUNCTIONS								
1) Creek Maintenance per Agreement w/ other agencies including maintenance of revegetation sites per permit requirements and activities required per court order/litigation.		$ 165	$ 165	$ 165	$ 165	$ 165	$ 165	$ 165
MAINTENANCE								
1) Channel Maintenance*		$ 247	$ 1,404	$ 3,413	$ 3,413	$ 3,413	$ 3,413	$ 651
a. Sediment and Silt Removal			*$ 540*	*$ 600*	*$ 600*	*$ 600*	*$ 600*	
b. Erosion Prevention and Repair			*$ 45*	*$ 450*	*$ 450*	*$ 450*	*$ 450*	
c. Vegetation and Weed Abatement			*$ 819*	*$ 1,170*	*$ 1,170*	*$ 1,170*	*$ 1,170*	
d. Mitigation for Channel Maintenance Activites		*$ 131*	*$ 752*	*$ 1,193*	*$ 1,193*	*$ 1,193*	*$ 1,193*	
2) Property and Appurtenances Maintenance			$ 30	$ 40	$ 50	$ 60	$ 70	$ 10
3) Trash and Debris Removal			$ 9	$ 12	$ 15	$ 18	$ 21	
4) Graffiti Removal			$ 1	$ 1	$ 1	$ 2	$ 3	
5) Fencing and Signage			$ 12	$ 16	$ 20	$ 24	$ 28	$ 5
6) General Maintenance/Engineering/Administrative Staffing	$ 1,316	$ 40	$ 60	$ 80	$ 100	$ 160	$ 180	$ 20
7) Maintenance Warehouse	$ 80		$ 48	$ 64	$ 80	$ 96	$ 112	$ 10
8) Hazmat Investigation, Removal and Disposal	$ 57		$ 36	$ 48	$ 60	$ 72	$ 84	$ 5
Subtotal	**$ 1,453**	**$ 336**	**$ 1,600**	**$ 3,674**	**$ 3,739**	**$ 3,845**	**$ 3,911**	**$ 701**
* Includes $165 thousand in mandated functions.								
EMERGENCY SERVICES								
1) Flood Awareness Program	$ 27		$ 18	$ 24	$ 30	$ 36	$ 42	$ 18
2) Emergency Operation Center	$ 15		$ 9	$ 12	$ 15	$ 18	$ 21	$ 9
3) Sandbag Work	$ 40				$ 40	$ 48	$ 560	
Subtotal	**$ 82**	**$ -**	**$ 27**	**$ 36**	**$ 85**	**$ 102**	**$ 623**	**$ 27**
LAND USE REVIEW	**$ 366**		**$ 220**	**$ 293**	**$ 366**	**$ 440**	**$ 512**	**$ 100**

Table 6-4

FLOOD CONTROL PROGRAM LEVEL OF SERVICE and PROPOSED YEAR 2000 OPERATING BUDGET -- South Zone

($ Thousands)

		BASELINE PROGRAM AFTER YEAR 2000 (LEVEL OF SERVICE)						
EXPENDITURE CATEGORIES	97-98 Budgeted	F	E	D	C	B	A	Proposed Budget 00-01
OPERATING PROJECTS								
1) Flood Insurance Liaison Study	$ 10			$ 10	$ 12	$ 14	$ 16	
2) Waterways Management Planning Study					$ 100	$ 120	$ 140	
3) Automated Mapping/GIS	$ 46					$ 50	$ 60	
4) Watershed Management Coordination Project	$ 17						$ 20	
5) Pajaro River COE Study								
6) Nonpoint Source								
7) Environmental								
a. Fisheries Management Plan								
b. Stream Resource Inventory								
c. Water Quality								
d. Fish Passage								
e. Regulatory Agency Permit Coordination	$ 8		$ 4	$ 6	$ 8	$ 10	$ 12	$ 4
f. Red-Legged Frog Habitat Plan/ ESA	$ 40		$ 24	$ 32	$ 40	$ 48	$ 56	$ 24
g. Environmental Strategy	$ 75						$ 75	
8) Sedimentation Study								
9) Solid Waste Management Study	$ 18							
10) Maintenance Guidelines								
11) Maintenance Program EIR	$ 255		$ 255					$ 40
12) Environmental Policy Development								
13) Comprehensive Flood Management Project	$ 130							
14) Water Resource Integration/Coordination	$ 13						$ 13	
15) Regional Board Watershed Initiative								
16) Stream Water Use Communication	$ 30						$ 30	
Subtotal	**$ 642**	**$ -**	**$ 283**	**$ 48**	**$ 160**	**$ 242**	**$ 422**	**$ 68**
ADMINISTRATIVE								
1) Administrative	$ 115	$ 46	$ 69	$ 92	$ 115	$ 138	$ 161	$ 40
2) Benefit Assessment Management	$ 51		$ 30	$ 40	$ 50	$ 60	$ 70	$ 20
3) Engineering Support	$ 88	$ 36	$ 54	$ 72	$ 90	$ 108	$ 126	$ 20
Subtotal	**$ 254**	**$ 82**	**$ 153**	**$ 204**	**$ 255**	**$ 306**	**$ 357**	**$ 80**
TOTAL	**$ 2,797**	**$ 418**	**$ 2,283**	**$ 4,255**	**$ 4,605**	**$ 4,935**	**$ 5,825**	**$ 976**

PROJECTED ANNUAL REVENUE AFTER YEAR 2000 [1] **$ 976**

1. Revenue projection assumes: Issuance of maximum available debt by FY 2000, Property tax will increase at 2% per year, Benefit Assessment will decrease to 1.25 times debt service, Annual interest revenue is calculated at 5.5% for 6 months (excludes interest on capital reserves), Debt service has been deducted to show available annual revenue.

Table 6-4

South Zone Cash Flow Projection
Baseline Program Through 2010
($ Thousands)

	Budgeted 97/98	Projected 98/99	Projecte 99/00	Projected 00/01	Projected 01/02	Projected 02/03	Projected 03/04	Projected 04/05	Projected 05/06	Projected 06/07	Projected 07/08	Projected 08/09	Projected 09/10
Beginning Reserve Balance	**4,662**	**3,210**	**3,309**	**4,213**	**4,444**	**4,685**	**4,936**	**5,197**	**5,468**	**5,751**	**6,045**	**6,352**	**6,672**
Revenues													
Property Tax	736	751	766	781	797	813	829	845	862	880	897	915	933
Benefit Assessment	1,990	2,030	2,070	762	762	762	762	762	762	762	762	762	762
Interest*	331	253	260	274	287	301	315	330	345	361	378	395	414
TOTAL	**3,057**	**3,034**	**3,096**	**1,818**	**1,846**	**1,876**	**1,907**	**1,938**	**1,970**	**2,004**	**2,038**	**2,073**	**2,109**
Operating Outlays													
Debt Service	610	610	610	610	610	610	610	610	610	610	610	610	610
Maintenance	1,453	1,206	958	701	715	729	744	759	774	789	805	821	838
All Other Operations Costs	1,344	984	625	275	281	286	292	298	304	310	316	322	329
TOTAL	**3,407**	**2,800**	**2,193**	**1,586**	**1,606**	**1,625**	**1,646**	**1,666**	**1,688**	**1,709**	**1,731**	**1,754**	**1,776**
Balance Available for Capital & Reserves	**4,312**	**3,443**	**4,213**	**4,444**	**4,685**	**4,936**	**5,197**	**5,468**	**5,751**	**6,045**	**6,352**	**6,672**	**7,005**
Capital Appropriations													
Automated Mapping/GIS	46	46											
Upper Llagas Creek - Reimbursable	655	-											
Upper Llagas Creek - Non-Reimbursable	130	20					-	-	-	-			
Lower Llagas Creek - Reimbursable	187	56	-	-	-	-	-	-	-	-			
Lower Llagas Creek - Non-Reimbursable	84	12	-	-	-	-	-	-	-	-			
(Shaded area represents un-funded CIP) **TOTAL**	**1,102**	**134**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Balance Available after CIP	**3,210**	**3,309**	**4,213**	**4,444**	**4,685**	**4,936**	**5,197**	**5,468**	**5,751**	**6,045**	**6,352**	**6,672**	**7,005**
Reserves													
Required Operating Reserves (50% of operating outlays)	1,703	1,400	1,097	793	803	813	823	833	844	855	866	877	888
Available Operating Reserves	1,703	1,400	1,097	793	803	813	823	833	844	855	866	877	888
Capital Reserves	1,506	1,909	3,116	3,651	3,882	4,123	4,374	4,635	4,907	5,191	5,487	5,795	6,117
Total Available Reserves	**3,210**	**3,309**	**4,213**	**4,444**	**4,685**	**4,936**	**5,197**	**5,468**	**5,751**	**6,045**	**6,352**	**6,672**	**7,005**
Restricted Reserves													
Held for Outstanding DWR Claims	**3,593**	**3,593**	**3,593**										

* Includes interest earned on restricted reserves

Baseline Program Assumptions

1) 1997-98 beginning reserve balance if from the FY 1996-97 audited financial statement.
2) Utilize available remaining debt capacity by 6/2000 to finance Capital Program.
3) Level of Service for maintenance and operations reduced to a level that can be supported by available annual operating revenue.
4) Capital Appropriations based on draft 1998-99 Capital Improvement Plan adjusted for inflation at 2% per year and modified to reflect the baseline strategy.
5) Revenue from benefit assessments will increase 2% per year until the 6/2000 sunset. After the sunset, revenue will be equal to 1.25 times the debt service.
6) Interest revenue is calculated at 5.5%.
7) Revenue from property taxes will increase at 2% per year.
8) Maintenance and operations costs will increase at 2% per year after FY 00/01.

Table 6-5

CHAPTER 7
REVIEW OF PROGRAM FUNDING MECHANISMS

INTRODUCTION

In 1996, California voters approved Proposition 218. Proposition 218 was written to augment Proposition 13, approved by California voters in 1978 to limit the authority of government to impose *ad valorem* taxes on property. While Proposition 13 limits the rate by which property taxes may be assessed, Proposition 218 imposes special requirements on governments that act to establish or increase existing benefit assessments or fees related to property ownership.

Historically, local officials have levied benefit assessments on land to pay for public improvements and services that benefit that land. The Santa Clara Valley Water District (District) has levied benefit assessments for flood management facilities in five flood management zones established by the District.

There are numerous variances between the existing statutory acts relied on to impose the benefit assessments levied by the District and the requirements of Proposition 218. Proposition 218 contains provisions to allow the existing assessment program to continue unchanged. However, any increases not provided for in the original assessment (such as extension of the assessment period) must comply with Proposition 218 provisions.

In June 2000, the District benefit assessments expire (except for long term obligations including debt service through the year 2024). This report summarizes funding mechanisms which may be pursued by the District for capital improvement projects and for operation and maintenance activities for flood management facilities.

DEFINITIONS

This section provides definitions and clarifications of words and phrases. Where such definitions are defined by the courts or Proposition 218 itself, a notation is provided.

- *Benefit Assessment* is an involuntary "charge imposed on real property for a local public improvement of direct benefit to that property" (Solvang Municipal Improvement District v. Board of Supervisors).
- *Taxes* are involuntary charges against property or on the activities of an individual or landowner which pay for public services and facilities regardless of the relative benefit to the individual taxpayer.
- *Fees* are charges on individuals which do not exceed the estimated reasonable costs of providing a service.
- *Special benefit* is "a particular and distinct benefit over and above general benefits conferred on real property located in the district or to the public at large. General enhancement of property value does not constitute 'special benefit.'" (Proposition 218).
- *District* is "an area determined by an agency to contain all parcels which will receive a special benefit from a proposed public improvement or property-related service." (Proposition 218).

SUMMARY OF PROPOSITION 218

To establish a special assessment or increase an existing benefit assessment, Proposition 218 defines seven requirements in addition to the enabling requirements of any benefit assessment act(s) employed to establish the assessment (where the requirements are conflicting, Proposition 218 requirements supersede statutory act requirements). Proposition 218 also defines requirements in order to establish, continue, or increase a fee or charge related to property ownership. The Proposition 218 requirements for special assessments and fees are summarized in this section.

Proposition 218 Provisions for All Special Assessments

- Identify all parcels which will have a special benefit conferred on them and upon which the assessment will be imposed. Derive the proportionate special benefit to each parcel in relationship to the total costs of the proposed project or service, and ensure that any assessment does not exceed the reasonable cost of the proportional special benefit conferred on that parcel. Government owned parcels are not exempt from assessment.

- A detailed engineer's report prepared by a registered professional engineer certified by the State of California must support all assessments.

- Each parcel owner must be provided written notice of the proposed assessment, including the amount, duration, reason, basis, date, time and place of a public hearing on the assessment and instructions and procedures applicable to the completion, return and tabulation of ballots.

- Each notice provided to each parcel owner will contain a ballot which provides the parcel owner with space to indicate name, reasonable identification of the parcel and opposition to or support for the proposed assessment.

- A public hearing must be held 45 days or more after mailing notices to record owners of affected parcels. Ballots will be weighted according to the proportional financial obligation of the affected property and counted at the public hearing, and if a majority of the ballots *counted* oppose the proposed assessment, the assessment will not be imposed.

- The burden to demonstrate the validity of any assessment is that of the local agency.

- If the ballot procedure described above is determined by the court(s) to conflict with the Constitution of the United States, a 2/3 majority approval of the electorate within the district is required *in addition to* the provisions described above.

Proposition 218 Provisions for Property Related Fees and Charges

- Identify each parcel for which a fee is proposed, calculate the amount to be imposed, provide written notice to the record owner of the amount, basis for calculation, reason, and date, time and location of public hearing. A public hearing to consider written protests must be held 45 days or more after the written notification.

- If written protests are received from a majority of owners of identified parcels prior to the public hearing, the fee will not be imposed.

- Revenues from the fee shall be used only for the purpose for which it was collected and shall not exceed the funds required to provide the property related service. The amount of the fee imposed on any parcel or individual as an incident of property ownership shall not exceed the proportional cost of the service attributable to the parcel. No fee may be imposed unless the service is actually used by or is immediately available to the owner of the property. Fees for potential or future use of a service are not permitted. No fee or charge may be imposed for general governmental services.

- Except for fees for sewer, water, and refuse collection services, all property related fees must be approved by a majority vote of the owners of the property subject to the fee or, at the option of the agency, by a two-thirds vote of the electorate residing in the affected area. The protest ballot must be held 45 days or more after the public hearing.

- Beginning July 1, 1997 all property related fees or charges shall comply with the applicable provisions of Proposition 218.

CURRENT DISTRICT FUNDING MECHANISMS

The District Act provides that the District may "cause taxes or assessments to be levied and collected for the purpose of paying any obligation of the district, and to carry out any of the purposes of this act, in the manner hereinafter provided." Specifically, the District may "levy ad valorem taxes or assessments in the district, to pay the general administrative costs and expenses, including maintenance and operation of established works" and may do so by taxes or assessments levied to one or more zones, and/or by fees and charges collected consistent with other sections of the act. This authority is superseded by Proposition 13. The District continues to receive property tax revenue through the authority of state law. The California Government Code (Section 54300) authorizes the District to establish service fees for flood management activities.

Currently, the District receives revenue for the flood management program from two sources: *ad valorem* property taxes and benefit assessments. Additional revenue is generated from interest on reserves and from cost sharing agreements with state and federal governments. Revenue from *ad valorem* property taxes comprise approximately 30% of the total revenue for the flood management program, and benefit assessments comprise about 50% of the total revenue. The expiration of the benefit assessments may suspend any new capital projects, effectively eliminating revenues from cost sharing agreements, which currently comprise about 13% of the total revenues. Revenue from interest, currently about 7% of the total revenues, will also decline in amount as interest-bearing reserves diminish.

Revenue from *ad valorem* property taxes alone, as currently levied, are projected to be insufficient to sustain long term operation and maintenance activities in the five zones. It is likely that spiraling costs due to increasingly stringent regulatory requirements and greater environmental interest demands will eventually cause shortfalls in all zones. Alternatively, certain operation and maintenance activities may become impossible to implement, requiring new capital projects to continue to provide the existing level of flood protection.

The existing benefit assessments levied by the District impose involuntary charges related to property. The formula used to calculate the assessment is based on the type of land use and an estimate of runoff associated with that land use. This approach, authorized by the Benefit Assessment Act of 1982, essentially attempts to set charges by categories of land uses based on the relative *contribution* to flooding. Since Proposition 218 is a constitutional amendment, it supersedes all conflicting statutory law, including the Benefit Assessment Act.

Proposition 218 limits the approach to be used as the basis for special assessments related to property. Differences in the amount of an assessment can only be related to the *proportional special benefit* each property

receives from the improvement, as distinguished from *general benefits* which are relatively equitable to all properties and/or the community.

Proposition 218 requires the District to distinguish between general and special benefits within whatever districts (i.e., flood control zones) the District establishes within its jurisdiction, and places the burden of proof on the District to establish the validity of any assessment. The statement in the District Act "...that for the purpose of any tax or assessment levied... the property so taxed or assessed within a given zone is equally benefited" is not *proof*, as required by Proposition 218.

Therefore, to continue with an *assessment* approach to fund flood management programs, the District cannot simply attempt to renew the existing assessment program. Reduction in flood hazard to properties protected is a type of special benefit and a special assessment may be sought for this purpose. Although general benefits may occur as a result of the same projects funded by special assessments, these general benefits cannot be used as the basis for, or included in, a special assessment. General benefits may be used as the basis for, or included in, a service fee or a special tax.

District Resolution 94-60, referred to as the Flood Control System Master Resolution (Master Resolution) for flood facilities financing, contains provisions regarding long term obligations if the benefit assessment revenues were *replaced* with another source of revenue, such as a fee. The Master Resolution provides for the allocation of flood control system revenues and establishes covenants to secure the payment of obligations payable from those revenues. Several provisions and covenants of the Master Resolution address the source of funds, and specific changes in interest rates, annual principal and interest payments on Long-Term Parity Obligations, Refunding Parity Obligations, the total amount of revenue to be generated, and requires counsel opinion and independent consultant opinion regarding the validity and economic feasibility of imposing another method of generating revenue in lieu of the benefit assessment. It does not preclude the establishment or imposition of another revenue generating method *in addition to* the assessment, it only imparts conditions on the use of a method if it is intended to *replace* the assessments. It is anticipated that the District will be required to continue the existing benefit assessment to finance existing long term obligations. However, the District is not prohibited from seeking to establish another source of revenue for the future flood management program.

AVAILABLE FUNDING MECHANISMS FOR FUTURE FLOOD MANAGEMENT PROGRAM

The District funding mechanism options for future flood management programs include one or a combination of the following:

Major Funding Mechanisms

- Establish a special assessment for capital improvement projects and/or maintenance
- Establish a special tax for all or part of the flood management program
- Establish a storm water conveyance utility to collect user service fees for operation and maintenance, and capital projects, similar to the Water Utility Enterprise

Supplemental Funding Mechanisms

- Establish development impact fees to fund capital improvement projects and permit and application fees for services
- Apply all available *ad valorem* property taxes from the Water Utility and District General Fund to the Flood Control Zone funds

Alternative Funding Strategy

- The District may also consider partnerships with the county and municipalities to take advantage of the greater flexibility and variety of funding mechanisms available to these forms of government. Among these are the capability to increase the *ad valorem* property tax for capital improvement projects and to establish and collect sales taxes for general services. Such partnerships offer both obvious and subtle advantages to the District and the community, at the cost of yielding some control over priorities.

Major Funding Mechanism 1: Establish Special Assessments

Proposition 218 prescribes how special assessments are to be defined, approved and imposed. The requirements include engineering reports which identify properties which will receive special benefits from capital projects and/or maintenance and establishes a value for that special benefit. General benefits must also be identified and excluded from the assessments. The District will likely have to re-define the flood control zones to include only those properties which receive benefit from the improvements and the properties that will pay for the improvements and/or for long term maintenance. Two assessment districts may be required for each zone, depending on whether or not the properties that receive special benefits from the improvements continue to receive special benefits from maintenance.

Advantages to this approach include:

- Control of funds
- Direct linkage to affected community to determine level of service
- Only affected property owners are involved (smaller population to work with)
- Tailor long term program to establish assessments on priority basis
- Potential to establish perpetual maintenance revenue

Disadvantages to this approach include:

- Increased administrative costs
- Costs to establish the assessments may be prohibitive
- Numerous public notices and hearings, difficult enabling requirements
- General benefits cannot be used as a basis nor included in the assessments
- Public agencies receiving special benefits for their properties will have no source of funding to pay special assessments
- Value of special benefit may not balance the cost of the service and/or project
- Difficult to identify and place value on general and special benefits; difficult to distinguish between general and special benefits
- Individual and group legal challenges likely; burden of proof of the value of the assessment/benefit is on the District
- Uncertainty regarding future maintenance needs and allowable practices

Major Funding Mechanism 2: Establish Special Taxes

The establishment of special taxes for capital projects and long term operation and maintenance is consistent with the statement in the District Act regarding equal benefits to all properties within a zone. Because it is a tax, not a fee or assessment, the amount of the tax is not limited to the relative value of the benefit or service provided to taxpayers. However, a special tax cannot be imposed on an *ad valorem* basis, but must be levied uniformly on all eligible taxpayers or properties. Typically, they are "per parcel" taxes apportioned according to the square footage of the parcel, a flat charge, or according to the assessment formula used by the District

to set the existing benefit assessments. They require adoption of an ordinance at a public hearing and approval by a 2/3 vote of the electorate. Proposition 218 only adds the single provision regarding special taxes that it is subject to reduction or repeal by popular initiative.

Advantages to this approach include:

- Charges are directed to the property
- Collection of fees can be placed on property tax bills
- Existing assessment formula can be used to calculate the tax amount(s)
- Existing database of property owners of record can be used for collection
- Revenue can be used for any purpose, including capital projects and/or operation and maintenance
- Control of funds
- Tax need not be county-wide; numerous zones or districts may be formed on priority basis (See "Mello-Roos" discussion below)
- Perpetual revenue generation until/unless repealed by Initiative

Disadvantages to this approach include:

- To increase taxes, the entire process needs to be repeated
- Likely to be litigated by anti-tax groups, but not individuals
- Election procedures required; the entire electorate within the zone or district is allowed to vote
- Revenue fixed unless inflation clause included/approved
- Numerous small zones or districts may be the most successful approach; Mello-Roos districts very complicated to establish
- Funds collected in one zone cannot be spent in another zone
- Uncertainty regarding future maintenance needs and allowable practices

Rather than attempting to establish a county-wide special tax, the District may consider formation of smaller taxation zones or districts on a priority basis. Projects may then be planned according to where the tax has received approval of the electorate within the affected area. The 1982 Mello-Roos Community Facilities Act enables special districts to establish community facilities districts (CFDs) and to levy special taxes to fund a wide variety of facilities and services. Proceeds can be used for direct funding and to pay off bonds for capital facilities. Mello-Roos financing is similar to special taxes and special assessments and may have advantages over both. The procedure for establishing a Mello-Roos district is not simple, and Proposition 218 requirements apply, since it is a special tax under the definitions established in this Constitutional amendment. However, the districts do not need to be contiguous which lends a certain advantage in the attempt to gain passage under the constraints of the two-thirds approval requirement. Areas which will not support the tax can simply be avoided. Since the Mello-Roos tax is not an assessment, there is no requirement to apportion the assessment based on benefit. However, apportionment based on benefit is an option but may not be done on an *ad valorem* basis. This funding mechanism is a method of obtaining revenue for specific capital improvement projects through a special tax approved by 2/3 of the electorate in the district, which may have greater chance of success than a special assessment for the same purpose.

Major Funding Mechanism 3: Establish Storm Water Conveyance Utility Enterprise (User Fees)

The Revenue Bond Act of 1941 (California Government Code 54300) allows local governments to charge fees to finance facilities for revenue-producing public enterprises. This allows local governments to finance facilities that can pay for themselves through service charges, connection fees, tolls, admission fees, and rents. In the context of District flood management facilities, the fee could be based on the same formula as that used for the existing benefit assessment. That is, the fee would be based on the proportional amount of runoff from each

parcel. Such an approach is consistent with the provisions of Proposition 218, which requires that the service be immediately available and actually used by the affected owner, and any property owner who can demonstrate that the facilities are not used would be exempt from the fee. The District has previously exercised its authority to establish a utility and issue public enterprise bonds under this act for its Water Utility Enterprise, which establishes a precedent for this approach to funding a flood management program. Proposition 218 requires notification of all affected property owners, a public hearing, and a balloting process. Approval of the fee is by simple majority among the affected property owners, or 2/3 majority of the electorate residing in the affected area. Proposition 218 restricts the amount of the fee to that of the reasonable cost of the service provided, and requires the return of unused fees on an annual basis. Standby charges for emergency services are not allowed to be included. Collection of the fees may be accomplished by placing them on the property tax bill.

Advantages to this approach include:

- Charges for use of the facilities are directed to the property
- Only property owners of record are required to be notified
- Special election procedures not required, mailed balloting is allowed
- Funds are immediately available through issuance/sale of bonds (bond procedures still apply)
- Existing assessment formula can be used to calculate the fee amount(s)
- Existing database of property owners of record can be used for notification and balloting
- Revenue can be used for capital projects and/or operation and maintenance
- Control of funds
- Fee need only be collected for the year in which service is to be provided
- Perpetual revenue generation until/unless repealed by Initiative

Disadvantages to this approach include:

- To increase fees, the entire process needs to be repeated
- Likely to be litigated by groups and individuals
- Unclear as to who must demonstrate that runoff actually occurs from a given parcel and that the runoff actually enters a facility
- Unclear whether public properties can be exempted. If not, cities and county, as well as other public entities (e.g., school districts), have no ready source of revenue to pay District fees
- Funds raised in a zone must be spent in that zone, numerous zones required
- Billing and collection issues are problematic if use of the property tax bill is precluded by law or rejected by the county
- Maximum fee which can be established is limited by the reasonable cost to provide the service *and* the existing benefit assessment
- Not all flood management program activities can be funded by the service fees (such as emergency services)
- Uncertainty regarding future maintenance needs and allowable practices

Supplemental Funding Mechanism 1: Establish Development Impact Fees, Permit Fees

Proposition 218 does not apply to "existing laws relating to the imposition of fees or charges as a condition of development" and such fees continue to be governed by the Mitigation Fee Act. These fees do not require voter approval. However, there are numerous restrictions and provisions for accounting for the funds and their use which may result in excessive administrative costs. Development impact fees are authorized by the District Act (Subparagraph 9, Section 5) and may be imposed to finance all or part of the cost of public facilities. The fee must be uniformly and consistently imposed and must not exceed the amount needed to pay for the improvement. These fees may be helpful in financing capital projects, but are of little use in financing operation

and maintenance costs. Permit and application fees which cover the cost of processing permits and development plans may also be imposed without voter approval.

Advantages of this approach include:

- Impact fees and permit and application fees directly charge those using the service
- Funding for planned capital improvements in new development areas becomes immediately available
- Control over funds
- Consistent with most other agencies in California which provide these services
- Immediate implementation

Disadvantages of this approach include:

- Unpopular with cities and development industry; increases housing costs
- Administrative costs may be prohibitive
- Additional accounting and revenue tracking procedures required
- Uncertainty regarding future maintenance needs and allowable practices
- Revenue is not fixed, varies with development/economic conditions

Supplemental Funding Mechanism 2: Apply available* ad valorem *taxes from Water Utility to Flood Management Program

Currently, the District splits its *ad valorem* property tax allocation between the Water Utility Enterprise Fund, the Flood Control Zone Fund, and District General Fund. The District Act authorizes the District to levy *ad valorem* property taxes for "any of the objects or purposes of this Act of common benefit to the District", and the Board may choose how to proportion the tax revenue, or modify the proportioning, at any time.

Advantages of this approach include:

- Water rate adjustments and shifting of the funds can be accomplished gradually to reduce the fiscal impact on water rate payers
- Funds are directly linked to accomplishment of the District mission
- Indirect benefits are realized, such as increased water conservation
- Control of funds
- The flood control zone fund revenues are reduced by only 20 to 30% instead of 50 to 60%
- District buys time to better evaluate operation and maintenance approaches, costs, and funding mechanisms

Disadvantages of this approach include:

- Unpopular with water rate payers
- Uncertainty regarding future maintenance needs and allowable practices

Alternative Funding Strategy: Partner with County and/or Municipal Governments to Generate Revenue

Proposition 13 established a constitutional maximum property tax rate of 1 percent, and the state allocated the revenues between competing jurisdictions within a county. The base property tax allocation established by the state for a local government was based on the share of the property tax going to that local government before Proposition 13. In 1986, California voters approved Proposition 46, a constitutional amendment that restored to counties and cities the authority to issue General Obligation (G.O.) bonds, subject to a 2/3 majority approval

by a jurisdiction's voters. The bonds are used to finance the acquisition and construction of public capital facilities and real property, but cannot be used to pay for operations and maintenance. The jurisdiction issuing a G.O. is authorized to levy an *ad valorem* property tax at the rate necessary to repay the principal and interest of the bonds, above the 1 percent limit imposed by Proposition 13. State law sets the maximum indebtedness as 15% of the assessed valuation of all real and personal property within the boundaries of general law cities, and of 5% for counties. While the District alone may not issue G.O. bonds, it may be able to form partnerships with one or more cities to secure funding for capital projects related to flood management. This is one of several funding mechanisms available to cities and the county which are not available to the District, but could be used to fully or partially fund the flood management program.

Advantages of this strategy include:

- Releases the District from acquisition of relatively short term capital funding, allowing the District to focus on securing long term operation and maintenance funding
- Engagement of the local jurisdictions in planning, design, and construction of capital projects, thereby providing additional resources and opportunities to facilitate project implementation
- Relatively immediate availability of funds to allow earlier project start times
- Fosters partnerships which improve future working relationships
- Provides community specific services
- Perpetual revenue generation until/unless repealed by Initiative

Disadvantages of this approach include:

- Loss of control of funds; need formal agreements (requires negotiations)
- Potential inter-jurisdiction conflicts (city/city, city/District, city/county, county/District)
- Cities and the county may have higher priorities for G.O. bond funding
- Gann appropriation limits apply, reducing municipalities/county debt capacity
- Municipalities/county may be interested only in capital projects, not funding long term maintenance
- Uncertainty regarding future maintenance needs and allowable practices

FLOOD MANAGEMENT PROGRAM FUNDING
MAJOR FUNDING MECHANISMS

IMPLEMENTATION CONSIDERATIONS	RENEW EXISTING BENEFIT ASSESSMENT	DO NOTHING	SPECIAL ASSESSMENT	SPECIAL TAX	UTILITY (User Service Fees)
FUNDING ISSUES	Proposition 218 supersedes 1982 Benefit Assessment Act and reverses assessment method.	Existing Benefit Assessment revenues reduce to 125% of debt service in year 2000. Master Resolution restricts use of revenue. Property Taxes variable.	Restricted/Specific use of revenue for activities which impart special benefits to property. Assessments cannot include general benefits and cannot exceed value of special benefit.	May be for any purpose, including General Fund. May establish one or many districts/zones.	Similar to Water Utility Enterprise. Set rates annually; may issue revenue Bonds for CIPs. Restricted to reasonable cost of service provided.
EASE OF IMPLEMENTATION	Impossible	Easy	Very Difficult. Detailed study required. Many districts/zones needed. Cannot use current assessment formula. Not tied to election process.	Difficult. Must be levied uniformly(flat rate or 'per parcel' based on area); may use current assessment formula; tied to election process.	Difficult. Property owners have first refusal right. May use current assessment formula. District option to tie to election process. May require one or many districts/zones
ENABLING REQUIREMENTS	Existing Benefit Assessment does not conform with CA Constitutional Law (Proposition 218).	None. Existing Benefit Assessments (BA) cannot be increased, renewed, or extended (See Renew Existing BA). Property Tax (PT) increases limited by law, adjusted automatically by County.	Engineer's report required to separate special benefits from general benefits; public hearing; weighted ballots (simple majority); value of assessment limited to value of special benefit; only record owners vote.	Public hearing to adopt ordinance or resolution; 2/3 approval by district/zone electorate. Final filing date Aug '98 for Nov '98 (Board action May '98)	Public notice/hearing for record owners; no written majority protest from record owners; simple majority of record owners OR 2/3 approval by district/zone electorate. If 2/3 electorate chosen, final filing date Aug '98 for Nov '98 (Board Action May '98).
ENACTMENT PERIOD	N/A	No enactment required.	May take 2-3 years for assessment districts to be formed county-wide.	One year. May take longer if several districts formed.	One year or longer if many districts/zones formed. Six months to one year for one district/zone.
ANNUAL PUBLIC HEARINGS	N/A	Annually for Benefit Assessments.	Annually	Not Required	Annually
PROGRAM ELEMENT APPLICABILITY	N/A	Debt Service (BA) Maintenance (BA) Emergency Services (PT) Land Use Review (PT) Operating Projects (PT) Administrative (BA,PT) Capital Projects (BA,PT)	Maintenance Capital Projects	General Fund Maintenance Emergency Services Land Use Review Operating Projects Administrative Capital Projects	Maintenance Capital Projects

Table 7-1

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(Alternatives)

2/25/98

FLOOD MANAGEMENT PROGRAM FUNDING
Implementation Issues of Major Funding Mechanisms

ALTERNATIVES	ADVANTAGES	DISADVANTAGES
DO NOTHING	Easiest to Implement in short term. Revenues predictable - more precise planning. Revenue from Benefit Assessments continues through debt service period.	Long term decline in level of service. Revenue from Benefit Assessments gradually decline, then expire. No new capital projects funded by Benefit Assessments. Revenue use restrictions on Benefit Assessments.
SPECIAL ASSESSMENT	Focuses service to benefiting properties. Can be tailored to priority areas. Property owners determine level of service. Perpetual unless repealed by Initiative. Only property owners are involved (smaller population to convince).	Up front costs to establish assessments may be prohibitive. Value of special benefit may not balance cost of service/project. Difficult to identify and place values on special and general benefits. Legal challenges likely, burden of proof on District.
SPECIAL TAX	Unrestricted use of revenue. Can be county-wide or tailored to priority areas. Perpetual unless repealed by Initiative. Existing assessment formula can be used to set rates. Provides fixed income source alternative to Property Tax.	Revenue fixed unless inflation clause included. Must be levied uniformly - cannot be ad valorem. 2/3 electorate approval required. Tied to formal election process. Several districts/zones may be needed.
UTILITY	Adjustable scale of districts/zones. Existing assessment formula can be used. May work within a rate "ceiling" to adjust rates. Focused service/Level of service defined by community.	Restricted use of revenue - must be identified at time of approval. Several districts/zones may be required. Annual accounting of expenditures; Individual and general legal challenges likely; burden of proof may be on District.

Table 7-2

FLOOD MANAGEMENT PROGRAM FUNDING
Supplemental Funding Mechanisms

IMPLEMENTATION CONSIDERATIONS	APPLY ALL PROPERTY TAXES TO FLOOD MANAGEMENT PROGRAM	DEVELOPMENT IMPACT FEES	PERMIT FEES
FUNDING ISSUES	• Unrestricted use of revenue. • Takes revenue from Water Utility Enterprise.	• Only significant where major development is underway or planned. • Funds must be returned if not used by specified date.	• Restricted to the reasonable cost to provide a specific service.
EASE OF IMPLEMENTATION	• Moderately Difficult • Requires review of Water Utility Enterprise activities and funding.	• Moderately Difficult • Not subject to Proposition 218 requirements	• Relatively Easy • Not subject to Proposition 218 requirements.
ENABLING REQUIREMENTS	• Board direction	• Compliance with Mitigation Fee Act: 1. Identify purpose and relationship to fee. 2. Identify all other income sources and designate date for expenditure. 3. Hold public hearing to adopt Ordinance.	• Establish basis for fee services. • Public Hearing to adopt Ordinance/Resolution.
ENACTMENT PERIOD	• Immediate	• Immediate	• Immediate
PUBLIC HEARINGS	• None required	• Annually	• None Required
PROGRAM ELEMENT APPLICABILITY	• Debt Service • Maintenance • Emergency Services • Land Use Review • Operating Projects • Administrative • Capital Projects	• Capital Projects	• Land Use Review • Applicable Operating Projects

Table 7-3

FLOOD MANAGEMENT PROGRAM FUNDING

Applicability of Available Funding Mechanisms to Current Program Elements

PROGRAM ELEMENTS	FUNDING MECHANISM		
	DO NOTHING	SPECIAL ASSESSMENT	SPECIAL TAX
DEBT SERVICE	Existing Benefit Assessment collects 125% of debt service per Master Resolution.	Bonds may be issued against the assessment. Cannot be used for prior debt service.	Unrestricted use for this purpose.
MAINTENANCE	Level of service restricted to revenue available from property tax and revenue from Benefit Assessments (BA) above debt service; BA revenue must be applied to zones where collected.	May be included in Special Assessment only if a special benefit can be identified. Possible in some areas.	Unrestricted use for this purpose.
EMERGENCY SERVICES	Flood management program portion funded by revenue from property tax.	Unlikely that special benefit can be identified for this use.	Unrestricted use for this purpose.
LAND USE REVIEW	Flood management program portion funded by revenue from property tax.	Unlikely that special benefit can be identified for this use.	Unrestricted use for this purpose.
ADMINISTRATIVE	Cost to administer Benefit Assessments paid by assessments (reduces funds above debt service). Other costs funded by property tax.	May include only those costs necessary to administer the assessment.	Unrestricted use for this purpose.
OPERATING PROJECTS	Flood management program portion funded by revenue from property tax.	May be included in Special Assessment only if a special benefit can be identified. Possible in some areas.	Unrestricted use for this purpose.
CAPITAL PROJECTS	Use of Benefit Assessment revenues defined by Master Resolution. Property tax revenue may be used on pay-as-you-go basis.	Primary purpose of assessment. Must confer special benefit to the properties assessed.	Unrestricted use for this purpose.

Table 7-4

FLOOD MANAGEMENT PROGRAM FUNDING

Applicability of Available Funding Mechanisms to Current Program Elements

PROGRAM ELEMENTS	FUNDING MECHANISM			
	UTILITY	APPLY PROPERTY TAX	IMPACT FEES	PERMIT FEES
DEBT SERVICE	Bonds may be issued against the fee. Cannot be used for prior debt service.	Unrestricted use for this purpose.	Bonds may be issued against the fee. Cannot be used for prior debt service.	Cannot be used for this purpose.
MAINTENANCE	May be included but service must be provided in year fee collected.	Unrestricted use for this purpose.	Cannot be used for this purpose.	Cannot be used for this purpose.
EMERGENCY SERVICES	Proposition 218 does not allow property based fees for this purpose.	Unrestricted use for this purpose.	Cannot be used for this purpose.	Cannot be used for this purpose.
LAND USE REVIEW	Proposition 218 does not allow property based fees for this purpose.	Unrestricted use for this purpose.	Cannot be used for this purpose.	Primary purpose of this fee.
ADMINISTRATIVE	May include only those costs necessary to administer the fee.	Unrestricted use for this purpose.	Cannot be used for this purpose.	May include only those costs necessary to administer the fee.
OPERATING PROJECTS	May be included if the project provides a service immediately available to property owners in the year funds collected for the project.	Unrestricted use for this purpose.	Cannot be used for this purpose.	May be used for this purpose if a service is included (e.g. well installation/destruction permits and inspection).
CAPITAL PROJECTS	May be included if specified in the fee approved (pay-as-you-go basis) and/or if fee payers support revenue bonds against the fee.	Unrestricted use for this purpose.	Primary purpose of this fee.	Cannot be used for this purpose.

Table 7-4

CHAPTER 8
RECOMMENDATIONS OF THE ZONE ADVISORY COMMITTEES

A review of the Level of Service Worksheets for each of the zones indicates that after benefit assessments sunset in the year 2000, projected revenues are insufficient to maintain the current level of service. Several zones are facing shortfalls before the year 2000. All five of the Zone Advisory Committees stated that a reduced level of service is unacceptable. In addition, the committees recommended that the District proceed to address the issues identified in this report and develop flood management program alternatives beyond the year 2000.

The following motions were adopted by the Flood Control Zone Advisory Committees at their November 1997 meetings:

Northwest Zone Committee
The Committee recommended that the Zone use proceeds from issuance of authorized certificates of participation to finance the Adobe and Permanente Creek projects and use available income and Reserves to fund the operating and maintenance at current levels of service for the first few years after the benefit assessment sunsets. The committee indicated that reduced levels of service will not be acceptable, and they recommended that the board consider the issues identified in the Phase I work.

Central and North Central Zone Committees (this is a joint-committee and adopted the same motion)
"On the basis that there would be no additional funding, Level of Service E would be considered the baseline level of service, providing that the cost projections are modified to accommodate mitigation costs with corresponding reductions in other services for the same total cost projection; and that this group strongly suggests that Level of Service E would be unacceptable and that additional funding is needed and other funding alternatives need to be investigated. Level of Service E is the minimum level of service in which the District would perform mandated and essential services, maintain improved facilities, protect homes and properties along improved facilities, provide emergency services, and implement permit requirements and development policies (e.g. development in the floodplains, stormwater runoff controls, etc.). Also included are all other functions supporting this level of service."

East Zone
The East Zone Committee recommended that the District pursue alternative funding soon to meet future funding needs after the benefit assessments sunset. They further recommended that the East Zone be fiscally conservative in the mean time and not undertake large capital projects unless federal and state cost sharing are in place.

South Zone Committee
The Committee voted to advise the Board that it did not believe the proposed South Zone budget was sufficient and to request the Board to direct staff to review all alternative revenue options available to the South Zone.

Additional comments and recommendations by each of the Zone Committees are listed in Appendix I.

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APPENDIX A
PROGRAM ACTIVITIES DESCRIPTION

Below are brief explanations of projects and/or program activities listed on the zone projections worksheet.

I. DEBT SERVICE

Payment of interest and principal on long-term debt.

II. MAINTENANCE

1. *SEDIMENT AND SILT REMOVAL*
   Removal of in-stream sediments to maintain channel capacity, clearing in front of outfalls to prevent local flooding, clearing at stream gage locations, and improvement of fish passage in lowflow channels and fish ladders.

2. *EROSION PREVENTION AND REPAIR*
   Implementation of preventative and remedial slope protection measures to protect structures, maintenance roads, and vegetation from the effects of erosion. Measures include the use of rock riprap, sacked concrete slope protection, gabions, geoweb, and biotechnical methods.

3. *VEGETATION AND WEED ABATEMENT*
   Removal of vegetation to maintain channel capacity, clearing in front of outfalls to prevent local flooding, clearing at stream gage locations, and improvement of fish passage in lowflow channels and fish ladders. Vegetation work also includes fire hazard mitigation and weed control on District rights-of-way. Methods include mechanical and hand removal, and herbicide application.

4. *PROPERTY AND APPURTENANCES MAINTENANCE*
   Work includes access road work, vector (rodent) control, and miscellaneous property maintenance.

5. *TRASH AND DEBRIS REMOVAL*
   Removal of trash and debris from District facilities.

6. *GRAFFITI REMOVAL*
   Cleaning of graffiti along District facilities.

7. *FENCING AND SIGNAGE*
   Work includes installation and repair of fencing and signage along District facilities.

8. *GENERAL MAINTENANCE/ENGINEERING/ADMINISTRATIVE STAFFING*
   Engineering, technical, and administrative support for ongoing maintenance activities.

9. *LEVEE MAINTENANCE*
   Routine inspection and maintenance of levees to ensure structural integrity.

10. *MAINTENANCE WAREHOUSE (000609)*
Provides for routine and emergency maintenance warehousing services and inventory control which serves various flood control, water utility and District programs.

11. *HAZMAT INVESTIGATION, REMOVAL AND DISPOSAL*
Investigate, analyze, remove and dispose of hazardous materials from District property. Investigate properties prior to acquisition by the District.

III. EMERGENCY SERVICES

1. *FLOOD AWARENESS EDUCATION PROGRAM (000201)*
This project supports communication programs which address flood management, flood safety, and creek stewardship issues. This project supports both the overall flood management program and the Comprehensive Flood Management Project.

2. *EMERGENCY OPERATIONS CENTER (600603)*
This project provides for the maintenance for the District's EOC, the post earthquake inspection of District facilities, the maintenance of dam failure inundation maps and the maintenance of the emergency action plan for Anderson Dam as required by FERC.

3. *SANDBAG PUBLIC ASSISTANCE PROGRAM (000805)*
Through this program, the District provides free sandbags to the public during times of flooding to assist the public in their flood fighting efforts. The District provides empty sandbags to all cities and the county and provides filled sandbags at District-operated locations. The program assists the public in their efforts to protect their property from damage due to flooding.

IV. LAND USE REVIEW

This operation provides for the enforcement and application of Ordinance 83-2, review of environmental documents, and coordination with other agencies with regards to land use decisions.

V. OPERATING PROJECTS

1. *FLOOD INSURANCE LIAISON STUDY (000402)*
This operation provides for continuous liaison with the public and the Cities and County relative to their participation in the National Flood Insurance Program and the Community Rating System (CRS) programming. These programs have been developed to assist the Federal Emergency Management Agency (FEMA) in their ongoing efforts to manage the floodplains and identify flood hazards. Work will also include acquiring and modifying the detailed analysis being prepared by FEMA's current contractor.

2. *WATERWAYS MANAGEMENT PLANNING STUDY*
The objective of this project is to maintain and update the data in the Waterways Management Model, which produces a priority list for each zone. The study will establish a zone-wide facility inventory including flood damages, creek capabilities, and items needed to establish project priorities based on District criteria.

3. *AUTOMATED MAPPING/GIS (00403)*
This project provides for continued implementation and operation of the District's major Geographic Information System (GIS).

4. *WATERSHED MANAGEMENT COORDINATION PROJECT (007904)*
Development of an internal plan to identify, coordinate, and integrate existing watershed-based projects and programs in the District. It will evaluate the overall efficiency, as well as the need for additional programs, if necessary, to ensure that these watershed efforts fulfill the District's dual mission of water and flood management.

5. *SAN FRANCISCO BAY SHORELINE STUDY*
Provide liaison with the Army Corps of Engineers' study to examine the various alternatives for providing protection to the San Francisco Bay shoreline from saltwater flooding.

6. *NONPOINT SOURCE (007902)*
This mandated operation accounts for staff time and consultant services necessary for the District to comply with and implement its agency-specific responsibilities under the Santa Clara Valley Urban Runoff Pollution Prevention Program regarding surface water quality of streams and of South San Francisco Bay and the protection of their beneficial uses. The scope of this operation is that portion of Santa Clara County which drains to San Francisco Bay.

7. *ENVIRONMENTAL*

   A. *FISHERIES MANAGEMENT PLAN*
   Preparation and implementation of a fisheries management plan to preserve and protect fish and aquatic resources.

   B. *STREAM RESOURCE INVENTORY (00406)*
   This project consolidates natural resource data acquisition and analysis and efforts to develop and implement natural resources management plans in support of Integrated Water Resources Planning. A District-wide strategy and watershed-specific stream resource inventory and management plans will be developed and implemented to identify and resolve sensitive resource issues using a more effective comprehensive, coordinated approach so that conflicts between District Water Supply and Flood Control management and natural resources can be minimized.

   C. *WATER QUALITY STUDIES*
   This pertains to water quality studies in support of the NPS permit.

   D. *FISH PASSAGE*
   This project provides funds to eliminate artificial barriers to fish migration and to design and prepare plans and specifications for the construction of modifications to fish ladders and fish screens.

   E. *REGULATORY AGENCY PERMIT COORDINATION*
   This project supports the general ongoing operations of the Environmental Resources Unit related to environmental planning. It includes coordination of environmental regulatory authorizations and compliance, acquisition of environmental information,

and short-term environmental studies to support unanticipated projects being performed by the District.

F. *RED-LEGGED FROG HABITAT PLAN (000408)*
This project includes review of all existing red-legged frog literature, compiling all known records of occurrence within the District service area, evaluation and delineation of all potential habitat sites and development of a habitat conservation plan to meet requirements of the Federal Endangered Species Act.

G. *ENVIRONMENTAL STRATEGY (000410)*
This project will address environmental concerns related to District projects and programs, create a positive resolution to a complaint against the District which supports the District's mission and goals, and provide an overall framework for related efforts such as specific projects or species concerns. The project consists of three main elements. The first element, development of a strategy to address the water rights complaint, was completed in FY 1996-97. The second element includes development and implementation of a fisheries management plan identified in the first element and will occur in phases. The third element is to coordinate this work with related District projects and programs.

8. *SEDIMENTATION STUDY*
This study examines sedimentation problems in each flood control zone and identifies alternative solutions to reduce high maintenance costs.

9. *SOLID WASTE MANAGEMENT STUDY (000412)*
This project will develop and implement long-term comprehensive solid materials management strategies to: improve the reliability of solid materials and waste management systems; reduce overall sediment disposal costs; and ensure that the district is maximizing the use of alternatives to disposal.

10. *MAINTENANCE GUIDELINES (000405)*
This project provides for hydraulic analysis of improved channels and development of guidelines and standards for maintenance activities.

11. *MAINTENANCE PROGRAM EIR (000407)*
This District-wide project consists of preparing and implementing two programmatic Environmental Impact Reports for the District's Vegetation Management Program and sediment removal and erosion protection activities.

12. *ENVIRONMENTAL POLICY DEVELOPMENT*
This project addressed the Board's Strategic Planning Objective of developing an Environmental Policy to provide overall direction for District projects and programs.

13. *COMPREHENSIVE FLOOD MANAGEMENT PROJECT (000404)*
The primary project objective for this fiscal year is to complete development of the baseline programs in each flood control zone. The baseline programs within each zone assume no additional revenue after the year 2000, when benefit assessment sunsets. This Phase I work includes identifying ongoing program activities and historical expenditures, prioritizing those expenditures, and identifying and evaluating alternative funding mechanisms for the program.

Recommendations for the baseline programs and Phase II of the flood management program master plan will be developed with input from the flood control zone advisory committees

14. *WATER RESOURCE INTEGRATION/COORDINATION (000409)*
This project coordinates and integrates various activities within the Water Resources Management Group to address key strategic issues defined by the Group Manager.

15. *REGIONAL BOARD WATERSHED INITIATIVE (007914)*
The Regional Board's Watershed Management Initiative is a broad-based, stakeholder-driven process with the goal of developing a comprehensive watershed management plan for the Santa Clara Basin (the areas of Santa Clara County which drain to San Francisco Bay, including portions of Alameda and San Mateo Counties). District staff have actively participated in this process as a stakeholder representing, promoting, and protecting the water supply and flood control interests of the District.

16. *STREAM WATER USE COMMUNICATION (007915)*
The purpose of this project is to develop an ongoing program to improve internal communication and develop mutual understanding and relationships between the District and key regulatory agencies in order to effectively develop and comply with conditions of regulatory permits and agreements associated with surface waters and related scope of areas covered by permit and agreement conditions as well as applicable laws, regulations, and policies. Over the short term, this project will also ensure continued compliance with the final judgment dated August 9, 1995, from Superior Court.

VI. ADMINISTRATIVE

1. *ADMINISTRATIVE*

A. *RISK MANAGEMENT*
This project allocates that portion of the cost center's contribution to the District's Risk Management program for the coming fiscal year. The District's Risk Management Program includes a self-insured retention of $2,000,000 per occurrence and purchased insurance to limits consistent with our projected need and availability/cost of insurance in the marketplace.

B. *AUDITING*
This operation consists exclusively of contract auditors performing the annual examination of the District's financial records.

C. *COST CENTER SUPPORT PROJECT*
This project provides for costs required to support this zone which cannot be identified with any other specific project. Examples are advisory committee meetings, updating of manuals, supervision, cash flow monitoring, and other general activities.

2. *BENEFIT ASSESSMENT MANAGEMENT*
This operation provides for the annual review and update of the Flood Control Benefit Assessment programs. It includes preparation of the annual Benefit Assessment Report and

updating/correcting the annual Benefit Assessment roll that is sent to the County tax Collector for collection of the Benefit Assessments.

3. *ENGINEERING SUPPORT*

A. *BASIC ENGINEERING*

This operation provides labor to review the District's technical documents including the general provisions, special provisions, specifications, drawings, and consultant hiring procedures for all District construction projects. Funds are also provided to establish metric conversion value engineering, quality assurance and quality control guidelines in implementing District capital projects.

B. *BASIC HYDROLOGY/HYDROLOGIC DATA MANAGEMENT*

This is a continuing operation that includes all labor and support services associated with the preparation and management of the District's basic hydrologic information for both Flood Control and Water Supply functions as well as hydrologic support for specific jobs throughout the District. Hydrologic Data Management provides for collection, processing, analysis, storage and dissemination of hydrologic data including precipitation, streamflow, tide, reservoir levels and evaporation, weather and water supply and use reporting.

C. *CROSS VALLEY LEVEL AND BENCHMARKING*

This project provides a cross valley level circuit in the County. It also provides maintenance of the countywide benchmark system.

APPENDIX B
STRATEGIES TO DEVELOP A BASELINE PROGRAM

The Level of Service of the Baseline Program for each flood control zone will depend on the available revenues after year 2000.

LEVEL OF SERVICE F:

- ***Mandated and Essential Services***
  1. Maintain improved creeks in compliance with agreements with other agencies.
  2. Maintain revegetation areas in compliance with permit requirements.
  3. Perform activities in compliance with court orders/litigation.
  4. Perform general maintenance.
  5. Provide administrative services including risk management and auditing.
  6. Provide basic engineering services.

LEVEL OF SERVICE E:

- ***Minimum Level of Service (including Level of Service F)***
  (Maintain improved facilities, protect homes and properties along improved facilities, provide emergency services and implement permit requirements and development policies, e.g. development in the floodplains, stormwater runoff control, etc. Also include all other functions supporting this level of services).

  1. Maintain improved creeks to carry design flows;
     a. Silt and sediment removal.
     b. Vegetation and weed abatement.
     c. Erosion prevention and repair.
  2. Increase general maintenance to include hazardous materials investigation, removal, and disposal.
  3. Perform work required under the Endangered Species Act.
  4. Maintain District property and appurtenances, including fencing and signage, and maintenance warehouse services.
  5. Remove trash and debris for flood control purposes only.
  6. Remove graffiti to comply with cities' and county ordinances.
  7. Participate in flood awareness program.
  8. Provide emergency operations center services.
  9. Perform land use review.
  10. Manage benefit assessment program.
  11. Increase basic engineering to include hydrologic data management and maintenance of the cross valley level circuit and benchmark system.
  12. Coordinate with regulatory agencies on permitting issues.
  13. Perform maintenance impact studies in compliance with California Environmental Quality Act.

LEVEL OF SERVICE D:

- ***Level of Service E + Provide Additional Flood Protection and Other Related Services***
  (Increase to include maintenance of all facilities within District right of way, protect homes and properties along District facilities, perform activities stated in Community Rating System to reduce flood insurance. Also include other functions supporting this level of service).
  1. Maintain unimproved creeks to convey flood water efficiently, but without jeopardizing environmental habitat.
     a. Silt and sediment removal.
     b. Vegetation and weed abatement.
     c. Erosion prevention and repair.
  2. Perform flood insurance liaison study.

LEVEL OF SERVICE C:

- ***Level of Service D + Increase Flood Protection to 1% Level and Participate in Other Related Activities***
  (Increase to construct new capital improvement projects. Also include other functions supporting this level of service).
  1. Participate in sandbag program.
  2. Perform studies to improve maintenance services, such as solid waste management study.
  3. Perform capital improvement studies including waterways management planning study and other work to support construction of capital improvement projects.
  4. Construct capital improvement projects.

LEVEL OF SERVICE B:

- ***Level of Service C + Participate in Recreation and Beautification Projects and Other Related Activities***
  (Increase to participate in additional activities, such as recreation and beautification projects. Also include all other functions supporting this level of service).
  1. Increase trash and debris removal for aesthetic purposes.
  2. Increase graffiti removal to include non-mandated areas.
  3. Increase basic engineering to include automated mapping/GIS
  4. Acquire all right of way along creeks.
  5. Participate in recreation and beautification projects.

LEVEL OF SERVICE A:

- ***Level of Service B + Participate in Environmental Restoration and Enhancement Projects and Other Related Activities***
  (Increase to provide additional environmental services and to restore/enhance environmental habitats within District facilities. Also include other functions supporting this level of service).
  1. Increase regulatory agency permit coordination to include projects such as watershed management coordination project, water resource integration/coordination, and the Regional Board's watershed management initiative.
  2. Perform stream resource inventory.
  3. Participate in environmental restoration and enhancement projects.

APPENDIX C
COST OF MAINTENANCE

The information contained in this Appendix includes 1) an estimate of the costs to mitigate for future maintenance activities which impact wetlands and riparian habitats as identified in the administrative draft Maintenance EIR, and 2) summarizes the costs expended to accomplish the 1997 Urgent Sediment Removal Work at nine separate sites, and compares those costs to work performed at the same sites in previous years by District forces (these latter costs were not adjusted for inflation).

In summer 1997, after several years' effort and extended negotiations, the District obtained the necessary permits from all of the regulatory agencies to remove sediments from nine sites in three different flood control zones. The work at all nine sites was completed in calendar year 1997. Prior to the commencement of the extended permit negotiations, the work proposed was considered routine maintenance work and had historically been performed by the District on an as-needed basis.

After three years, in order to conclude the negotiations and obtain the necessary permits to commence work, the District agreed to a number of significant, new requirements imposed by the permitting agencies. Some of these new requirements included sediment screening, water quality testing, use of coffer dams, and maintaining live streamflows, all of which resulted in new costs. Additionally, dump fees, or the costs to dispose of sediments and debris at landfills has continued to increase dramatically over the past decade.

As the comparison of the historical versus 1997 costs at each site indicates, costs for work at these nine sites have increased 350% - 550%. These increases *do not* account for the costs of mitigating for the impacts of the routine maintenance work, which was also a requirement of the urgent sediment removal site work.

Mitigation for the impacts of ongoing maintenance activities is a precedent-setting and potentially costly new regulatory requirement the District may have to address. The District is currently preparing a Maintenance Program EIR in order to obtain a 10-year maintenance permit and estimates that, if mitigation is required, costs could exceed $50 million over the next 10 years. The estimated, one-time mitigation costs for wetland and riparian habitat impacts from the 10-year maintenance program activities is shown, by zone, on page C-13 of this appendix.

In light of the above, for baseline program development and future budget projections, staff assumed a 200% increase in sediment removal, erosion repair, and vegetation removal costs after year 2000 (this equates to 3 times the FY97-98 budget for each of these major maintenance activities). In addition, the estimated mitigation costs for maintenance activities in each zone were distributed over ten years.

Summary by Zone of 1997 Nine Site Urgent Sediment Removal Costs Compared with the Previous Removal Cost at Each Site

Zone	Site	Previous Sediment Removal Cost	1997 Sediment Removal Cost	Increased Cost in $	% Increase	Ratio of '97 Cost to Prior Cost (to nearest .5)
North West	San Francisquito	15,350	67,000	51,650	336%	4.5
	Stevens	42,200	228,000	185,800	440%	5.5
Total Northwest Zone		**$ 57,550**	**$ 295,000**	**$ 237,450**	**413%**	**5**
North Central	San Tomas Creek - U/S of 237	129,000	1,016,000	887,000	688%	8
	Saratoga Creek	82,538	282,000	199,462	242%	3.5
	San Tomas Ck - 101 to Walsh	57,300	217,000	159,700	279%	4
Total North Central Zone		**$ 268,838**	**$ 1,515,000**	**$ 1,246,162**	**464%**	**5.5**
East	Lower Penitencia	98,000	372,000	274,000	280%	4
	Los Coches	17,000	39,000	22,000	129%	2.5
	Calera	17,000	52,000	35,000	206%	3
	Berryessa	121,000	471,000	350,000	289%	4
Total East Zone		**$ 155,000**	**$ 934,000**	**$ 779,000**	**503%**	**3.5**
Grand Total All Zones		**$ 481,388**	**$ 2,744,000**	**$ 2,262,612**	**470%**	**5**

Summary by Zone of 1997 Nine Site Urgent Sediment Removal Costs

Compared with the Previous Removal Cost at Each Site

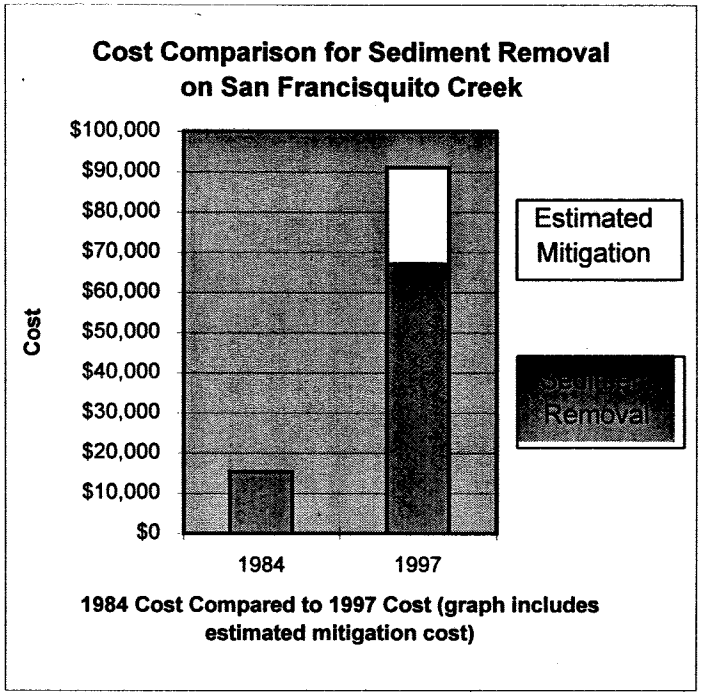
Including the Estimated Costs of Mitigation at each Site

Zone	Site	Previous Sediment Removal Cost	1997 Sediment Removal Cost Est Mitigation Included	Increased Cost in $	% Increase	Ratio of '97 Cost to Prior Cost (to nearest .5)
North West	San Francisquito	15,350	91,000	75,650	493%	6.5
	Stevens	42,200	287,000	244,800	580%	7.5
Total Northwest Zone		**$ 57,550**	**$ 378,000**	**$ 320,450**	**557%**	**7.5**
North Central	San Tomas Creek - U/S of 237	129,000	2,250,000	2,121,000	1644%	22.5
	Saratoga Creek	82,538	333,000	250,462	303%	4.5
	San Tomas Ck - 101 to Walsh	57,300	231,000	173,700	303%	4
Total North Central Zone		**$ 268,838**	**$ 2,814,000**	**$ 2,545,162**	**947%**	**13**
East	Lower Penitencia	98,000	806,000	708,000	722%	10.5
	Los Coches	17,000	82,000	65,000	382%	6
	Calera	17,000	73,000	56,000	329%	5
	Berryessa	121,000	891,000	770,000	636%	9
Total East Zone		**$ 253,000**	**$ 1,852,000**	**$ 1,599,000**	**632%**	**9**
Grand Total All Zones		**$ 579,388**	**$ 5,044,000**	**$ 4,464,612**	**771%**	**10**

SAN FRANCISQUITO CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1984	1997
Operations & Maintenance	Sediment Removal	$ 15,350	$ 48,000
	Dump Fees	-	-
	Coffer Dams	-	-
	Dewatering	-	10,000
	Security	-	2,000
	Containment Berms	-	-
	Sub-total	$ 15,350	$ 60,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 2,000
	Water Quality Testing	-	
	BMP Plan	-	
	BMP Turbidity Monitoring	-	
	Sub-total	$ -	$ 2,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 3,000
	Permitting	-	2,000
	Wildlife Surveys	-	
	Mitigation & Monitoring Plan	-	
	Operations & Reporting	-	
	Sub-total	$ -	$ 5,000
	Total	**$ 15,350**	**$ 67,000**
	Estimated Mitigation Costs		$ 24,000
	Total including Estimated Mitigation		**$ 91,000**



1984 Cost Compared to 1997 Cost (graph includes estimated mitigation cost)

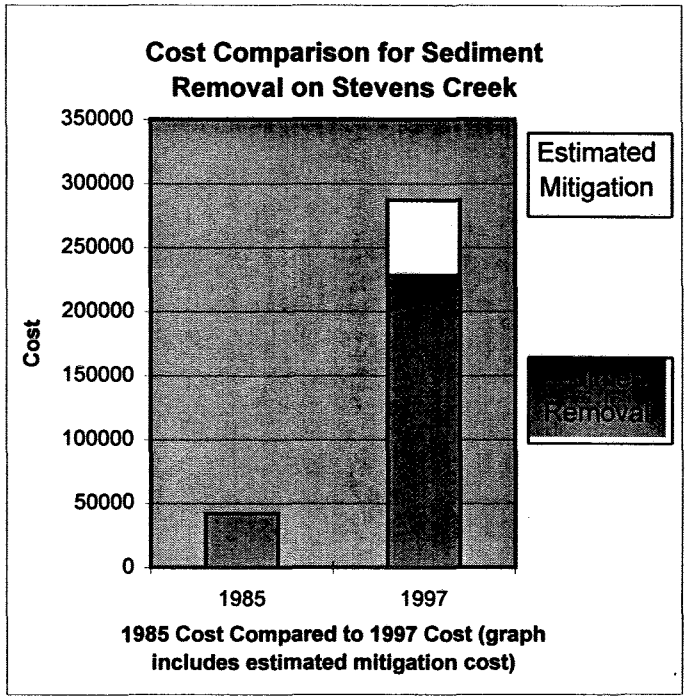
The increase represented in this comparison is **336%**. Therefore the cost to remove sediment on San Francisquito Creek has increased approximately **4.5** times what it was in 1984.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

STEVENS CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1985	1997
Operations & Maintenance	Sediment Removal	$ 42,200	$ 110,000
	Dump Fees	-	50,000
	Coffer Dams	-	-
	Dewatering	-	25,000
	Security	-	
	Containment Berms	-	-
	Sub-total	$ 42,200	$ 185,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 9,000
	Water Quality Testing	-	2,000
	BMP Plan	-	
	BMP Turbidity Monitoring	-	2,000
	Sub-total	$ -	$ 13,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 16,000
	Permitting	-	11,000
	Wildlife Surveys	-	
	Mitigation & Monitoring Plan	-	1,000
	Operations & Reporting	-	2,000
	Sub-total	$ -	$ 30,000
	Total	**$ 42,200**	**$ 228,000**
	Estimated Mitigation Costs		$ 59,000
	Total including Estimated Mitigation		**$ 287,000**



1985 Cost Compared to 1997 Cost (graph includes estimated mitigation cost)

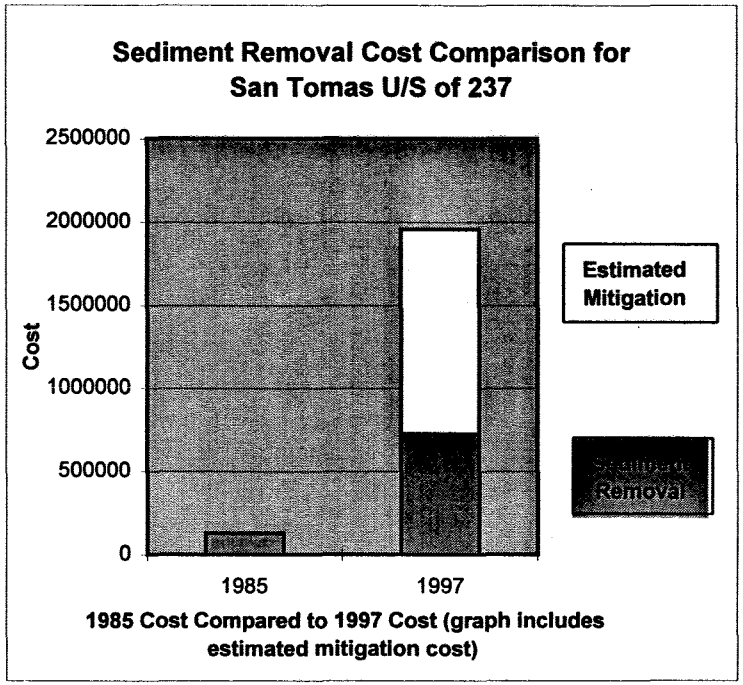
The increase represented in this comparison is **440%**. Therefore the cost to remove sediment on Stevens Creek has increased by approximately **5.5** times what it was in 1985.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

SAN TOMAS CREEK U/S of 237

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1985	1997
Operations & Maintenance	Sediment Removal	$ 129,000	$ 344,000
	Dump Fees	-	180,000
	Coffer Dams	-	50,000
	Dewatering	-	-
	Security	-	-
	Sub-total	$ 129,000	$ 574,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 30,000
	Water Quality Testing	-	8,000
	BMP Plan	-	1,000
	BMP Turbidity Monitoring	-	7,000
	Sub-total	$ -	$ 46,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 53,000
	Permitting	-	37,000
	Wildlife Surveys	-	1,000
	Mitigation & Monitoring Plan	-	3,000
	Operations & Reporting	-	8,000
	Sub-total	$ -	$ 102,000
	Total	**$ 129,000**	**$ 722,000**
	Estimated Mitigation Costs		$ 1,234,000
	Total including Estimated Mitigation		**$ 1,956,000**



1985 Cost Compared to 1997 Cost (graph includes estimated mitigation cost)

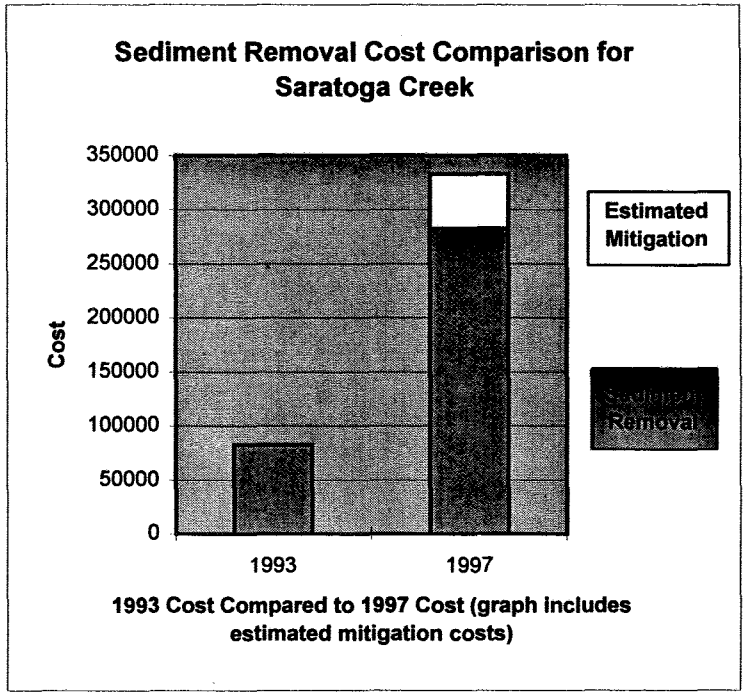
The increase represented in this comparison is **450%.** Therefore, the cost to remove sediment on San Tomas Ck U/S of 237 has increased nearly **5.5** times what it was in 1985.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

SARATOGA CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1993	1997
Operations & Maintenance	Sediment Removal	$ 65,873	$ 133,000
	Dump Fees	16,665	50,000
	Coffer Dams	-	-
	Dewatering	-	40,000
	Security	-	2,000
	Sub-total	$ 82,538	$ 225,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 12,000
	Water Quality Testing	-	3,000
	BMP Plan	-	-
	BMP Turbidity Monitoring	-	2,000
	Sub-total	$ -	$ 17,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 21,000
	Permitting	-	15,000
	Wildlife Surveys	-	
	Mitigation & Monitoring Plan	-	1,000
	Operations & Reporting	-	3,000
	Sub-total	$ -	$ 40,000
	Total	**$ 82,538**	**$ 282,000**
	Estimated Mitigation Costs		$ 51,000
	Total including Estimated Mitigation		**$ 333,000**



1993 Cost Compared to 1997 Cost (graph includes estimated mitigation costs)

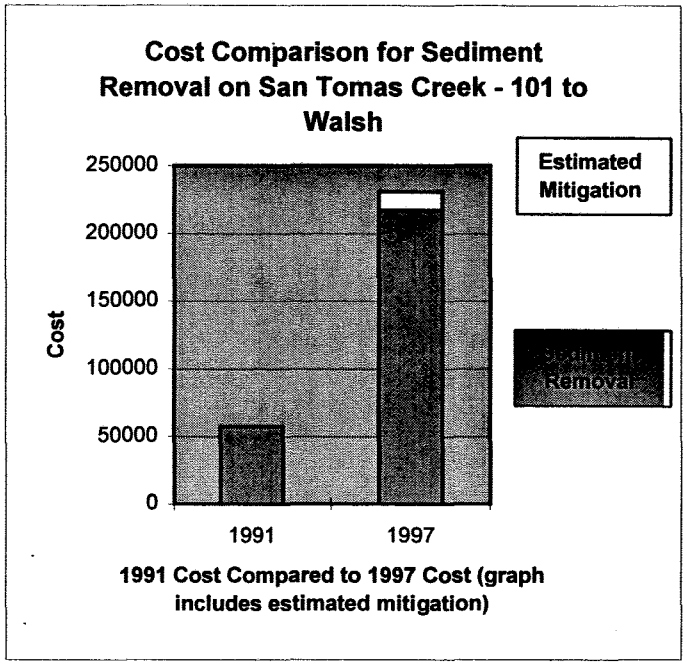
The increase represented in this comparison is **242%.** Therefore, the cost to remove sediment on Saratoga Creek has increased **3.5** times what it was in 1993.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

SAN TOMAS CREEK 101 TO WALSH

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1991	1997
Operations & Maintenance	Sediment Removal	$ 38,600	$ 140,000
	Dump Fees	18,700	40,000
	Coffer Dams	-	-
	Dewatering	-	20,000
	Security	-	-
	Sub-total	$ 57,300	$ 200,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 4,000
	Water Quality Testing	-	1,000
	BMP Plan	-	-
	BMP Turbidity Monitoring	-	1,000
	Sub-total	$ -	$ 6,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 6,000
	Permitting	-	4,000
	Wildlife Surveys	-	
	Mitigation & Monitoring Plan	-	
	Operations & Reporting	-	1,000
	Sub-total	$ -	$ 11,000
	Total	**$ 57,300**	**$ 217,000**
	Estimated Mitigation Costs		$ 14,000
	Total including Estimated Mitigation		**$ 231,000**



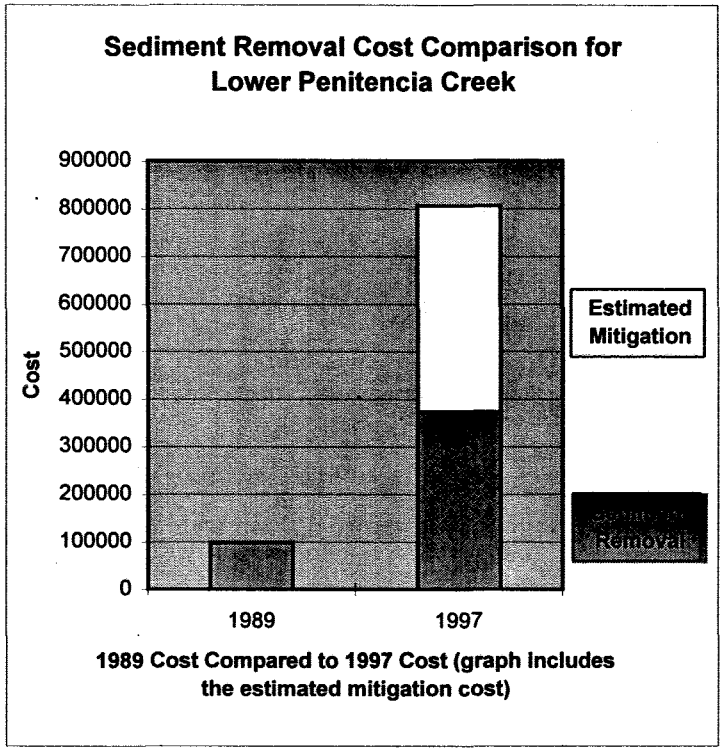
The increase represented in this comparison is **279%**. Therefore the cost to remove sediment on San Tomas Creek 101 to Walsh has increased nearly **4** times what it was in 1991.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

LOWER PENITENCIA CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1989	1997
Operations & Maintenance	Sediment Removal	$ 98,000	$ 221,000
	Dump Fees	-	72,000
	Coffer Dams	-	12,000
	Dewatering	-	-
	Security	-	-
	Containment Berms	-	-
	Sub-total	$ 98,000	$ 305,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 14,000
	Water Quality Testing	-	4,000
	BMP Plan	-	-
	BMP Turbidity Monitoring	-	2,000
	Sub-total	$ -	$ 20,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 25,000
	Permitting	-	17,000
	Wildlife Surveys	-	-
	Mitigation & Monitoring Plan	-	1,000
	Operations & Reporting	-	4,000
	Sub-total	$ -	$ 47,000
	Total	**$ 98,000**	**$ 372,000**
	Estimated Mitigation Costs		$ 434,000
	Total including Estimated Mitigation		**$ 806,000**



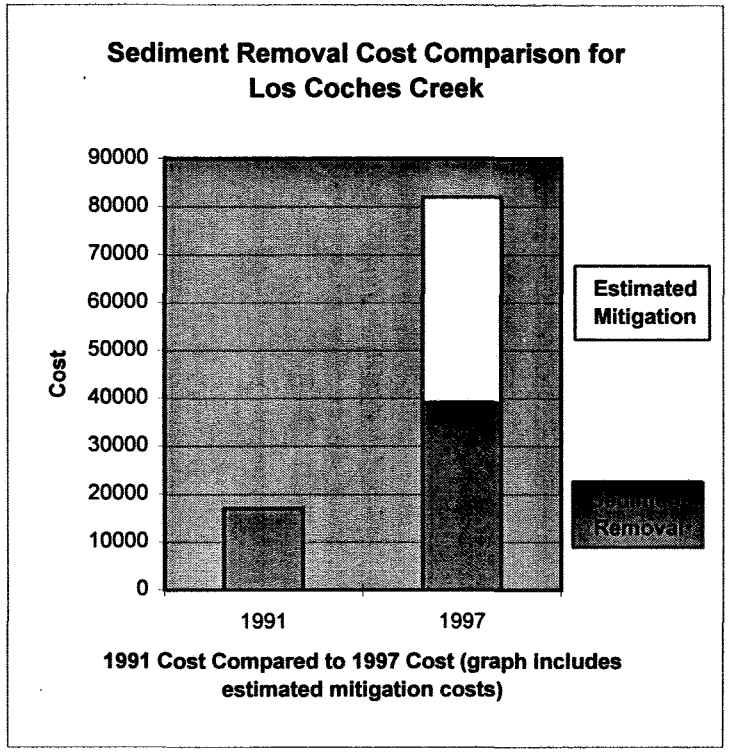
The increase represented in this comparison is **280%.** Therefore the cost to remove sediment on Lower Penitencia Creek has increased by nearly **4** times what it was in 1989.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

LOS COCHES CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1991	1997
Operations & Maintenance	Sediment Removal	$ 17,000	$ 19,000
	Dump Fees	-	9,000
	Coffer Dams	-	1,000
	Dewatering	-	2,000
	Security	-	1,000
	Containment Berms	-	-
	Sub-total	$ 17,000	$ 32,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 2,000
	Water Quality Testing	-	-
	BMP Plan	-	-
	BMP Turbidity Monitoring	-	-
	Sub-total	$ -	$ 2,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 3,000
	Permitting	-	2,000
	Wildlife Surveys	-	-
	Mitigation & Monitoring Plan	-	-
	Operations & Reporting	-	-
	Sub-total	$ -	$ 5,000
	Total	**$ 17,000**	**$ 39,000**
	Estimated Mitigation Costs		$ 43,000
	Total including Estimated Mitigation		**$ 82,000**



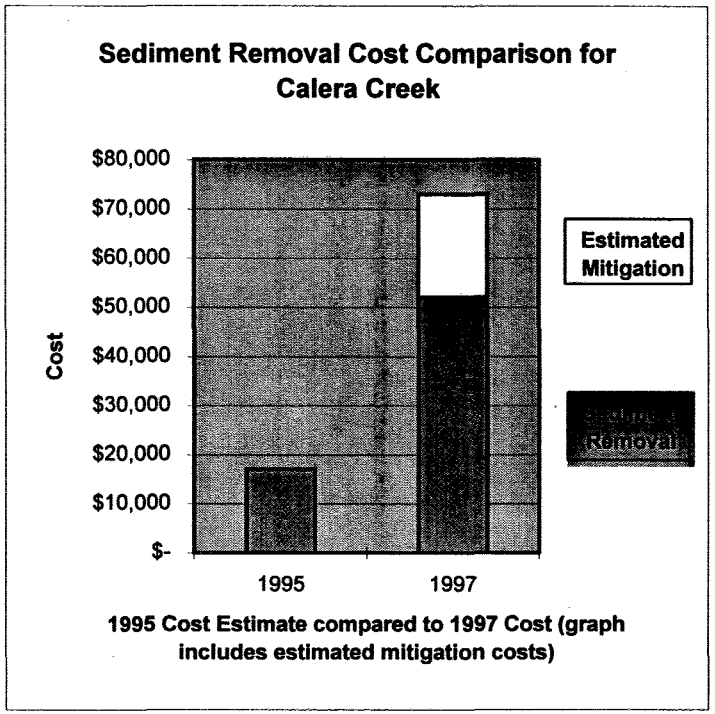
The increase represented in this comparison is **129%**. Therefore the cost to remove sediment on Los Coches Creek has increased by nearly **2.5** times what it was in 1991.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

CALERA CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1995	1997
Operations & Maintenance	Sediment Removal	$ 17,000	$ 18,000
	Dump Fees	-	20,000
	Coffer Dams	-	1,500
	Dewatering	-	1,500
	Security	-	1,000
	Containment Berms	-	-
	Sub-total	$ 17,000	$ 42,000
	Testing and Sampling		
Project Development	Sediment Screening	$ -	$ 2,000
	Water Quality Testing	-	1,000
	BMP Plan	-	-
	BMP Turbidity Monitoring	-	-
	Sub-total	$ -	$ 3,000
	Biological Resource Compliance		
Water Resources Management	CEQA	$ -	$ 4,000
	Permitting	-	2,000
	Wildlife Surveys	-	-
	Mitigation & Monitoring Plan	-	-
	Operations & Reporting	-	1,000
	Sub-total	$ -	$ 7,000
	Total	**$ 17,000**	**$ 52,000**
	Estimated Mitigation Costs		$ 21,000
	Total including Estimated Mitigation		**$ 73,000**



1995 Cost Estimate compared to 1997 Cost (graph includes estimated mitigation costs)

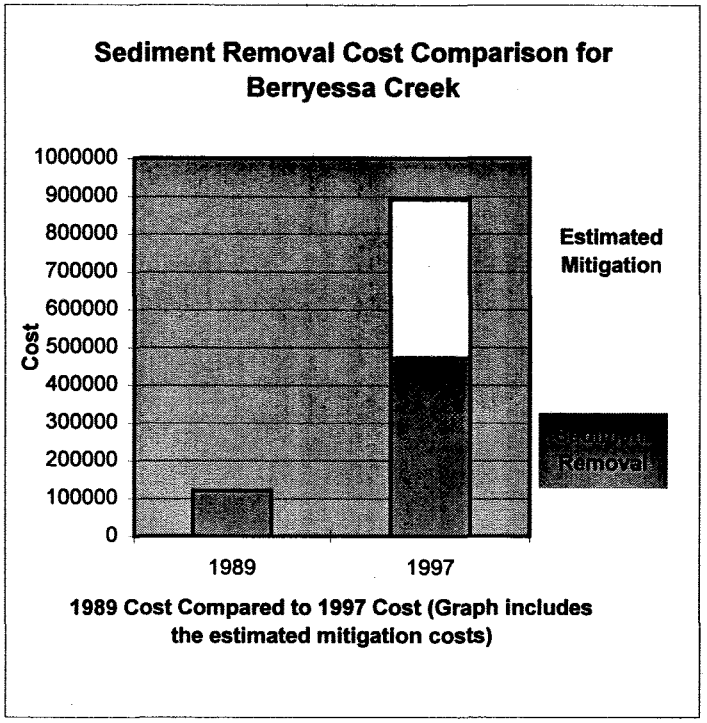
The increase represented in this comparison is **206%**. Therefore the cost to remove sediment on Calera Creek has increased **3** times what the estimate was in 1995.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

BERRYESA CREEK

Sediment Removal Cost Break-down and Comparison

Source of Cost	Field Operations	1989	1997
Operations & Maintenance	Sediment Removal	$ 121,000	$ 115,000
	Dump Fees	-	128,000
	Coffer Dams	-	18,000
	Dewatering	-	20,000
	Security	-	12,000
	Containment Berms	-	3,000
	Sub-total	$ 121,000	$ 296,000
Project Development	**Testing and Sampling**		
	Sediment Screening	$ -	$ 36,000
	Water Quality Testing	-	10,000
	BMP Plan	-	1,000
	BMP Turbidity Monitoring	-	6,000
	Sub-total	$ -	$ 53,000
Water Resources Management	**Biological Resource Compliance**		
	CEQA	$ -	$ 64,000
	Permitting	-	44,000
	Wildlife Surveys	-	1,000
	Mitigation & Monitoring Plan	-	3,000
	Operations & Reporting	-	10,000
	Sub-total	$ -	$ 122,000
	Total	**$ 121,000**	**$ 471,000**
	Estimated Mitigation Costs		$ 420,000
	Total including Estimated Mitigation		**$ 891,000**



1989 Cost Compared to 1997 Cost (Graph includes the estimated mitigation costs)

The increase represented in this comparison is **289%**. Therefore the cost to remove sediment on Berryessa Creek has increased nearly **4** times what it was in 1989.

The estimated mitigation cost was distributed among the nine sites according to wetland area acres.

ESTIMATED MITIGATION COSTS FOR 10-YEAR MAINTENANCE PROGRAM

Flood Control Zone	Tidal Wetland Mitigation (Acres)	Freshwater Wetland Mitigation (Acres)	Riparian Mitigation (Acres)	Total Mitigation Cost
NorthWest	10.2	2	2	$ 4,286,000
North Central	20	7	2	$ 9,885,000
Central	4.6	6	2	$ 7,018,000
East	7.2	21	2	$ 20,331,000
South	0	20	2	$ 11,930,000
Total	**42**	**56**	**10**	**$ 53,450,000**

Notes:

1. Mitigation acreages are based on 1:1 mitigation/impact ratio for estimating purposes.
2. Acreage estimates from administrative draft Maintenance Program EIR and preliminary staff assessments.
3. Right of Way Costs for Freshwater Wetland and Riparian Acreage estimated at $500,000/acre, except for South Zone estimated at $200,000/acre. Tidal Wetland Acreage estimated at $15,000/acre.
4. Costs for design, construction, maintenance, and monitoring of mitigation sites estimated as:

Tidal Wetlands	$115,000/acre
Freshwater Wetlands	$365,000/acre
Riparian	$115,000/acre

HISTORICAL EXPENDITURES
Erosion Repair Sediment Removal 1981-1996
(Routine Maintenance Only, Does not include Capital Erosion Protection Projects)

NORTHWEST FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR	SEDIMENT REMOVAL
Cupertino			
Stevens Creek		$ 16,000	$ 15,000
Los Altos			
Adobe Creek		$ 245,000	$ 1,000
Hale Creek		$ 59,000	$ -
Permanente Diversion		$ 7,000	$ 120,000
Permanente Creek		$ 5,000	$ 50,000
Stevens Creek		$ 22,000	$ -
	Subtotal	***$ 338,000***	***$ 171,000***
Los Altos Hills			
Adobe Creek		$ 57,000	$ 41,000
Matadero Creek		$ 9,000	$ -
Permanente Creek		$ 100,000	-
Summerhill Creek		$ 9,000	$ -
Stevens Creek		$ -	$ 366,000
Magdalena Creek		$ -	$ 12,000
	Subtotal	***$ 175,000***	***$ 419,000***
Mountain View			
Permanente Diversion		$ -	$ 92,000
Permanente Creek		$ 107,000	$ 42,000
Stevens Creek		$ 221,000	$ 366,000
	Subtotal	***$ 328,000***	***$ 500,000***
Palo Alto			
Adobe Creek		$ 113,000	$ 239,000
Matadero Creek		$ 49,000	$ 253,000
San Francisquito Creek		$ 34,000	$ 22,000
Palo Alto Flood Basin		$ 5,000	$ -
Barron Creek		$ -	$ 117,000
Stanford Channel		$ -	$ 3,000
	Subtotal	***$ 201,000***	***$ 634,000***
Sunnyvale			
Stevens Creek		$ 29,000	$ -
General		$ 103,000	$ -
	NORTHWEST ZONE TOTAL	**$ 1,190,000**	**$ 1,739,000**

HISTORICAL EXPENDITURES
Erosion Repair Sediment Removal 1981-1996
(Routine Maintenance Only, Does not include Capital Erosion Protection Projects)

NORTH CENTRAL FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR		SEDIMENT REMOVAL
Campbell				
San Tomas Creek	$	29,000	$	22,000
Smith Creek	$	39,000	$	26,000
Subtotal	***$***	***68,000***	***$***	***48,000***
Cupertino				
Calabazas Creek	$	217,000	$	26,000
Junipero Serra Creek	$	14,000	$	24,000
Regnart Creek	$	146,000	$	92,000
Saratoga Creek	$	18,000	$	43,000
Subtotal	***$***	***395,000***	***$***	***185,000***
Los Gatos				
San Tomas Creek	$	27,000	$	3,000
Smith Creek	$	3,000	$	-
Daves Creek	$	-	$	10,000
Subtotal	***$***	***30,000***	***$***	***13,000***
San Jose				
Calabazas Creek	$	185,000	$	16,000
Rodeo Creek	$	95,000	$	24,000
San Tomas Creek	$	10,000	$	174,000
Saratoga Creek	$	220,000	$	15,000
Guadalupe Slough	$	84,000	$	-
Subtotal	***$***	***594,000***	***$***	***229,000***
Santa Clara				
Calabazas Creek	$	88,000	$	517,000
San Tomas Creek	$	8,000	$	645,000
Saratoga Creek	$	52,000	$	278,000
El Camino Storm Drain	$	41,000	$	4,000
Subtotal	***$***	***189,000***	***$***	***1,444,000***
Saratoga				
Calabazas Creek	$	83,000	$	342,000
Rodeo Creek	$	13,000	$	1,000
San Tomas Creek	$	45,000	$	18,000
Saratoga Creek	$	240,000	$	5,000
Sobey Creek	$	11,000	$	-
Prospect Creek	$	4,000	$	-
Wildcat Creek	$	132,000	$	16,000
Subtotal	***$***	***528,000***	***$***	***382,000***

HISTORICAL EXPENDITURES
Erosion Repair Sediment Removal 1981-1996
(Routine Maintenance Only, Does not include Capital Erosion Protection Projects)

NORTH CENTRAL FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR		SEDIMENT REMOVAL
Sunnyvale				
Calabazas Creek	$	31,000	$	503,000
Sunnyvale East	$	703,000	$	893,000
Sunnyvale West	$	18,000	$	114,000
El Camino Storm Drain	$	51,000	$	6,000
Subtotal	***$***	***803,000***	***$***	***1,516,000***
Monte Sereno				
San Tomas Creek	$	18,000	$	-
General	$	48,000	$	-
NORTH CENTRAL ZONE TOTAL	**$**	**2,673,000**	**$**	**3,817,000**

CENTRAL FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR		SEDIMENT REMOVAL
Campbell				
Los Gatos Creek	$	132,000	$	21,000
Los Gatos				
Ross Creek	$	40,000	$	-
San Jose				
Alamitos Creek	$	89,000	$	-
Calera Creek	$	1,000	$	-
Canoas Creek	$	157,000	$	288,000
Golf Creek	$	35,000	$	14,000
Guadalupe River	$	229,000	$	315,000
Los Gatos Creek	$	204,000	$	2,000
Ross Creek	$	308,000	$	90,000
Guadalupe Creek	$	6,000	$	4,000
Randol Creek	$	5,000	$	88,000
Greystone Creek	$	-	$	21,000
Lone Hill Creek	$	-	$	2,000
Subtotal	***$***	***1,034,000***	***$***	***824,000***
Santa Clara				
Guadalupe River	$	22,000	$	307,000
General	$	66,000	$	-
CENTRAL ZONE TOTAL	**$**	**1,294,000**	**$**	**1,152,000**

HISTORICAL EXPENDITURES
Erosion Repair Sediment Removal 1981-1996
(Routine Maintenance Only, Does not include Capital Erosion Protection Projects)

EAST FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR		SEDIMENT REMOVAL
Milpitas				
Wrigley Ford Creek	$	1,000	$	59,000
Berryessa Creek	$	96,000	$	876,000
Calera Creek	$	8,000	$	49,000
Coyote Creek	$	4,000	$	-
Los Coches Creek	$	15,000	$	50,000
Piedmont Creek	$	31,000	$	18,000
Lower Penitencia	$	78,000	$	310,000
East Penitencia Creek	$	4,000	$	17,000
Tularcitos Creek			$	16,000
Subtotal	***$***	***237,000***	***$***	***1,395,000***
San Jose				
North Babb Creek	$	36,000	$	-
South Babb Creek	$	22,000	$	-
Berryessa Creek	$	14,000	$	166,000
Coyote Creek	$	35,000	$	-
Lower Silver Creek	$	199,000	$	727,000
Miguelita Creek	$	36,000	$	17,000
Upper Penitencia Creek	$	39,000	$	53,000
Upper Silver Creek	$	10,000	$	19,000
Quimby Creek	$	1,000	$	2,000
Thompson Creek	$	16,000	$	56,000
Fisher Creek	$	-	$	15,000
Sierra Creek	$	-	$	75,000
Norwood Creek	$	-	$	25,000
Subtotal	***$***	***408,000***	***$***	***1,155,000***
General	$	11,000	$	-
EAST ZONE TOTAL	**$**	**656,000**	**$**	**2,550,000**

HISTORICAL EXPENDITURES
Erosion Repair Sediment Removal 1981-1996
(Routine Maintenance Only, Does not include Capital Erosion Protection Projects)

SOUTH FLOOD CONTROL ZONE

FACILITY		EROSION REPAIR		SEDIMENT REMOVAL
Gilroy				
Llagas Creek	$	46,000	$	137,000
Uvas Creek	$	43,000	$	-
West Branch Llagas	$	20,000	$	-
Lions Creek	$	4,000	$	-
Burchell Creek	$	9,000	$	-
Jones Creek	$	-	$	59,000
Pajaro River	$	-	$	11,000
Princevalle Storm	$	-	$	3,000
Panther Creek	$	-	$	3,000
Rucker Creek	$	-	$	5,000
Morey Channel	$	-	$	14,000
Subtotal	***$***	***122,000***	***$***	***232,000***
Morgan Hill				
Llagas Creek	$	7,000	$	3,000
West Little Llagas	$	9,000	$	82,000
Uvas Creek	$	1,000	$	-
Madrone Channel	$	-	$	44,000
Tennant Creek	$	-	$	9,000
Subtotal	***$***	***17,000***	***$***	***138,000***
San Martin				
Corrallitos Creek	$	9,000	$	-
Llagas Creek	$	16,000	$	-
Center Creek	$	-	$	1,000
San Martin Creek	$	-	$	2,000
Subtotal	***$***	***25,000***	***$***	***3,000***
General	$	90,000	$	-
SOUTH ZONE TOTAL	**$**	**254,000**	**$**	**373,000**

SUMMARY OF JOINT-USE AGREEMENTS as of July 1997

Joint Use Agreements with other agencies encourage and facilitate the development of District property for diversified uses.

NORTHWEST FLOOD CONTROL ZONE

AGENCY	FACILITIES	LOCATION	USE
City of Palo Alto	Adobe Creek	Confl. Of Barron Creek adj. to Hwy. 101	
City of Mtn. View	Permanente Creek	Plymouth Street to North Shoreline Blvd.	Recreational Use
City of Mtn. View	Recreation	California Street to Mercy Street	Recreation
City of Cupertino	Stevens Creek	Easterly of Horse Ranch	Recreational facilities
City of Mtn. View (2 agreements)	Stevens Creek	L'Avenida north to Shoreline Prk (R1)	Public pathways & amenities
Co. of Santa Clara	Steven Creek Reservoir	At reservoir	Recreational facilities
State of CA Dept. of Forestry	Steven Creek Reservoir	Upper end of reservoir	Fire Control Station

NORTH CENTRAL FLOOD CONTROL ZONE

AGENCY	FACILITIES	LOCATION	USE
City of Cupertino	Calabazas Creek	Miller Ave. to Sorenson Ave.	Student walkway facility
City of Cupertino	McClellan Percolation Ponds	At percolation ponds	Recreation
City of Cupertino	Regnart Creek & Calabazas Creek	Calabazas Creek Confluence to East Estates Drive	Recreation
Town of Los Gatos	Rinconada Water Treatment Plant	At plant	Radio transmitter-receiver device
City of Santa Clara	San Tomas Aquino Creek	Central Expwy/Hwy 237	Bike & pedestrian path
City of Santa Clara	San Tomas Aquino Creek	Vicinity of Regency Plaza	Pedestrian trail & recreational facilities
City of San Jose	Saratoga Creek	English Drive to Glen Drive	Access, construction, etc. to pedestrian bridge
City of Saratoga	Saratoga Creek	Scotland Drive to Via Monte Drive	Bike & pedestrian path
Town of Los Gatos	Smith Creek	Easterly side of RWT Plant property	Public recreational use
City of Sunnyvale	Sunnyvale East Channel	Between Wolfe Road and Britton Ave.	Bike trail & parking area
Co. of Santa Clara	Sunnyvale East Outfall & Guadalupe Slough	Caribbean Drive to Calabazas Holding Basin	Recreational & park purposes
City of Saratoga	Wildcat Creek	Gardiner Park intersect with Portos Drive	Recreational site & facilities

SUMMARY OF JOINT-USE AGREEMENTS
as of July 1997

CENTRAL FLOOD CONTROL ZONE

AGENCY	FACILITIES	LOCATION	USE
City of San Jose	Alamitos Creek Lake	Los Alamitos Lake Park	Park & recreational Use
City of San Jose	Alamitos Creek, Calero Creek	Los Alamitos/Calero Creek park chain	Bicycle & pedestrian pathway 15' wide
City of San Jose	Alamitos Perc. Sys., Guad. Riv, Alamitos Crk	Ponds adj. to District Headquarters	Park and recreational
Co. of Santa Clara	Almaden Reservoir	At reservoir	Recreational purposes
City of San Jose	Calero Creek	Alamitos/Calero Creek park chain	Park and recreational
Co. of Santa Clara	Calero Reservoir	At reservoir	Recreational purposes
Co. of Santa Clara	Camden Perc Ponds	Dell Ave.	Recreational site
City of San Jose	Coyote-Alamitos Canal	Adj. to Manresa Court Laguna Seca Gardens	Community gardening
Almaden Valley Country Club	Golf Creek	Littman Drive to Hillcrest Drive	Private recreation
City of San Jose	Golf Creek	Golden Oak Park, Almaden Expwy. to Meridian Ave.	Park and recreational
City of San Jose	Guadalupe Creek	Admin. Bldg pond & surrounding grounds	Recreational
Co. of Santa Clara	Guadalupe Reservoir	At reservoir	Recreational purposes
City of San Jose	Guadalupe River	Highway 880 to Highway 280	Recreation
City of Santa Clara	Guadalupe River	Trimble Road/Hwy. 237	Bike & pedestrian path
Co. of Santa Clara	Lexington Reservoir	At reservoir	Recreational purposes
Co. Sublease w/LG Rowing Clb	Lexington Reservoir		
City of Campbell	Los Gatos Creek	Bascom Ave. to Highway 17	Bike & pedestrian Use
City of Campbell	Los Gatos Creek	Campbell Ave. to San Tomas Exprwy	Recreational site & facilities
City of San Jose	Los Gatos Creek	From Bascom Ave. to NE of Leigh Ave. (as amended)	Park and recreational
Co. of Santa Clara	Los Gatos Creek	Willow Glen Neigh. Assoc. (Leigh Ave/Meridian Ave.)	Install. & maint. of erosion cntrl. & veget. project
Co. of Santa Clara	Los Gatos Creek	Near Vasona Pump Station	Pedestrian trail & bike path
Town of Los Gatos	Los Gatos Creek	Knowles Drive to Town Terrace (partial)	Pedestrian & bike path
Town of Los Gatos	Los Gatos Creek	Lark Ave. to Vasona Dam	Recreation
Town of Los Gatos	Los Gatos Creek	North of Division Street to West Mozart Ave.	Recreation
Town of Los Gatos	Ross Creek	Blossom Hill Road & Hillbrook Drive	Public park
Town of Los Gatos	Ross Creek	Blossom Hill Park	Landscaping & pedestrian access
Town of Los Gatos	Ross Creek	Camino del Cerro to 915' DS (Los Gatos Villages)	Recreational site & facilities
Co. of Santa Clara	Vasona Reservoir	At reservoir	Recreational purposes

SUMMARY OF JOINT-USE AGREEMENTS
as of July 1997

EAST FLOOD CONTROL ZONE

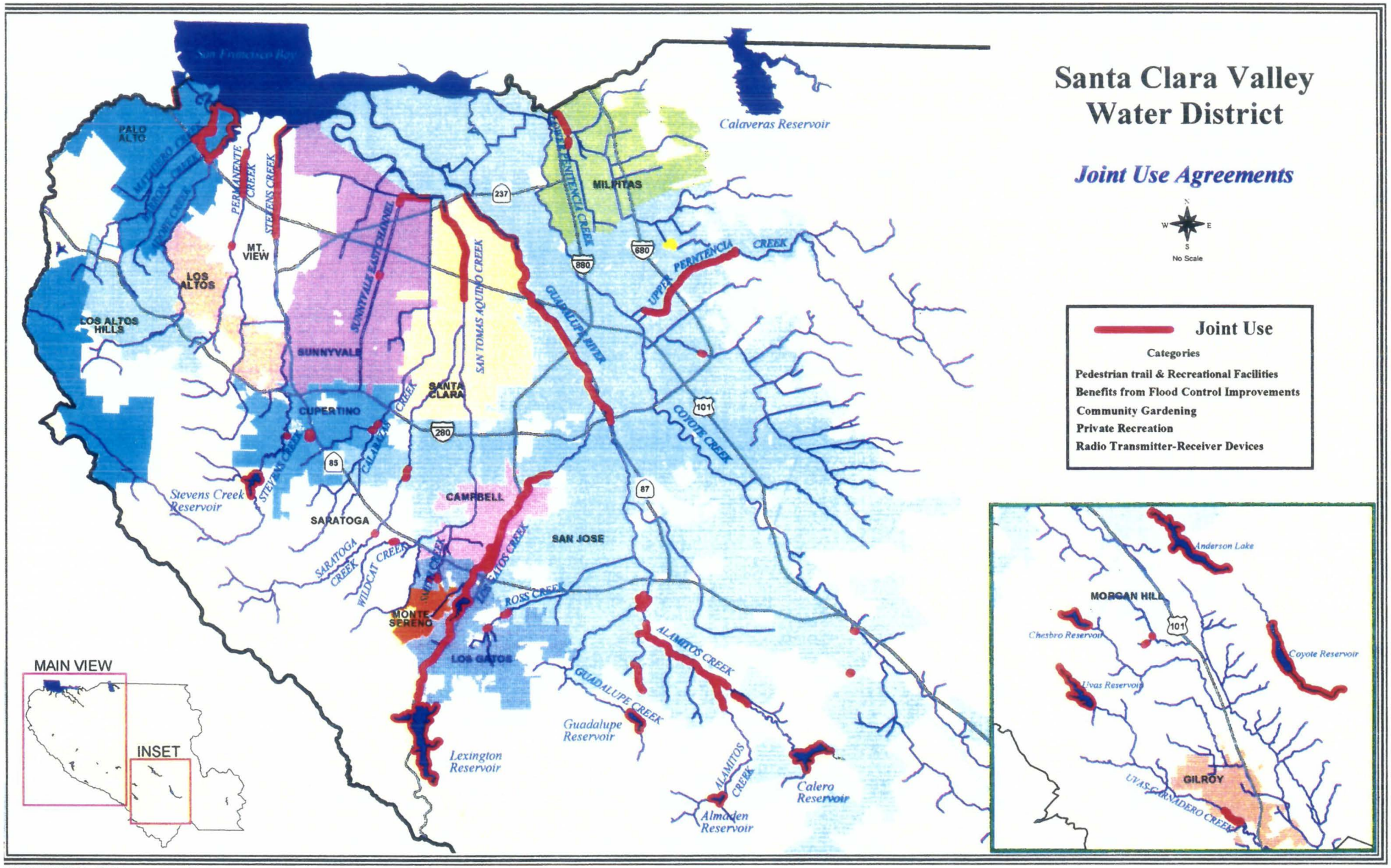
AGENCY	FACILITIES	LOCATION	USE
Co. of Santa Clara	Anderson Reservoir	At reservoir	Recreational purposes
City of San Jose	Coyote Perc. Sys.	California Maison/Metacalf Park & Regional Trail	Park & trail use
Co. of Santa Clara	Coyote Reservoir	At reservoir	Recreational purposes
City of Milpitas	Lower Penitencia Creek	N. Abbott Ave.-Milmont Dr./California Cir.	Emerg. access road & pedestrian trail
City of Milpitas	Lower Penitencia Creek	Hall Memorial Park	Park & recreational use
City of San Jose	Lower Silver Creek	North of Kammerer	Recreational facilities
Berryessa USD	Sierra Creek	Western border of Ruskin School	Recreational site & landscaping
City of San Jose & Co. of Santa Clara	Upper Penitencia Creek	King Road to Dorel Road	Public park & recreational use

SOUTH FLOOD CONTROL ZONE

AGENCY	FACILITIES	LOCATION	USE
Co. of Santa Clara	Chesbro Reservoir	At reservoir	Recreational purposes
City of Morgan Hill	Edmundson Creek/W. Little Llagas Creek	LaCrosse Dr. /Paradise Park Area	Park & recreational
Co. of Santa Clara	Uvas Reservoir	At reservoir	Recreational purposes

Santa Clara Valley Water District

Joint Use Agreements



Santa Clara Valley Water District

Joint Use Agreements

N
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No Scale

Joint Use

Categories

- **Pedestrian trail & Recreational Facilities**
- **Benefits from Flood Control Improvements**
- **Community Gardening**
- **Private Recreation**
- **Radio Transmitter-Receiver Devices**

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SUMMARY OF COST SHARING AGREEMENTS

NORTHWEST FLOOD CONTROL ZONE

PROJECT	FACILITY		DISTRICT COST	DATE
City of Los Altos				
Replace W. Edith Ave. Bridge	Adobe Creek	$	33,333	4/27/82
City of Mt. View				
Widening of Evelyn Ave. Bridge	Stevens Creek	$	221,000	9/28/82
Maintenance of Stevens Creek		$	2,100	10/4/88
Maintenance of Landscape Area		$	1,666	12/15/87
	Subtotal	***$***	***258,099***	
City of Palo Alto				
Construction of bank stability measures	San Francisquito Creek	$	187,500	9/12/89
Raising of footbridge and modification of footpath	Adobe Creek	$	38,900	7/28/92
Raising of footbridge and modification of footpath	Adobe Creek	$	34,800	10/16/90
Relocation of Matadero trunk sewer	Matadero Creek	$	18,900	10/16/90
Relocation of City electric facilities	Matadero Creek	$	18,700	2/7/89
Mitchell Park Footbridge relocation & installation of sanitary sewer	Matadero & Adobe Creeks	$	72,300	6/7/88
Relocation of City electrical facilities for construction of bridges	Matadero Creek	$	33,200	5/24/88
Design and const. of bank stabilization measures	San Francisquito Creek	$	200,000	5/5/87
Palo Alto Flood Basin cost sharing	Palo Alto Flood Basin	$	475,000	4/15/86
Construction of bank stabilization measures	San Francisquito Creek	$	40,000	6/26/84
Construction of bank stabilization measures	San Francisquito Creek	$	187,200	11/23/82
Construction of emergency bank stabilization measures	San Francisquito Creek	$	49,900	9/14/82
	Subtotal	***$***	***1,872,598***	
	TOTAL	**$**	**2,164,030**	

NORTH CENTRAL FLOOD CONTROL ZONE

PROJECT	FACILITY		DISTRICT COST	DATE
City of San Jose				
Installation of a 42" storm drainage pipe and outfall	Calabazas Creek	$	140,000	8/9/83
City of Santa Clara				
Reconstruction of Old Mt. View-Alviso Road Bridge	Calabazas Creek	$	15,000	4/10/90
Preparation of electronic parcel base map of East Foothills		$	19,000	5/18/93
	Subtotal	***$***	***34,000***	
Cities of Saratoga and Monte Sereno				
Improvement of two bridges	San Tomas Aquino Cr.	$	39,200	1/24/89
	TOTAL	**$**	**213,200**	

SUMMARY OF COST SHARING AGREEMENTS

CENTRAL FLOOD CONTROL ZONE

PROJECT	FACILITY	DISTRICT COST	DATE
City of Campbell			
Bike Path and Slope Stabilization Project	Los Gatos Creek	$ 192,000	7/18/89
City of San Jose			
Relocation of PG&E's 115kv electric transmission facilities	Guadalupe River	$ 5,850,000	7/12/94
Raising of Gold St. Bridge	Guadalupe River	$ 46,600	9/16/87
12-inch lateral, Hope Street Storm Drain Project	Guadalupe River	$ 5,700	3/4/93
Provide field office in River Street area	Guadalupe River	$ 18,500	11/26/90
Fund interim field office staffing & provide coverage for relocation services	Guadalupe River	$ 18,500	6/13/90
City staffing of Guadalupe River COE Project	Guadalupe River	$ 18,500	11/27/89
Preliminary design engineering for flood control project bridge projects	Guadalupe River	$ 4,000,000	7/12/94
Reconstruction of the Malone Road Bridge	Guadalupe River	$ 348,000	6/23/87
Storm drainage requirements in conjunction with Hope St. Realignment	Guadalupe River	$ 6,800	10/11/83
Design and construction services for the replacement of Hedding St. Bridge	Guadalupe River	$ 63,800	12/20/94
Replacement of Hedding St. Bridge	Guadalupe River	$ 1,925,000	1/9/96
Construction of flood control improvements	Guadalupe River	$ 2,627,000	2/4/86
Construction of flood control improvements to COE work	Guadalupe River	$ 18,550,000	3/24/92
	Subtotal	***$ 33,478,400***	
City of San Jose and County of Santa Clara			
Install/maintain recreational facilities on city land	Guadalupe River	$ 3,000	6/5/84
Santa Clara County Parks			
Trail construction	Lexington Dam	$ 179,000	8/6/96
	TOTAL	**$ 33,852,400**	

SUMMARY OF COST SHARING AGREEMENTS

EAST FLOOD CONTROL ZONE

PROJECT	FACILITY		DISTRICT COST	DATE
City of Milpitas				
Remove sludge from Coyote Creek	Coyote Creek	$	25,000	6/18/85
Participate in a topographic survey to delineate floodplains	Milpitas	$	8,500	3/5/96
Construction of bridge replacement	Coyote Creek	$	825,300	1/21/97
	Subtotal	***$***	***858,800***	
City of Milpitas and Santa Clara County Traffic Authority				
Modify Ranch Road on McCarthy Property	Coyote Creek	$	100,000	7/5/90
City of San Jose				
Construction of flood control measures	Lower Silver Creek	$	979,000	6/8/82
Construction of culvert under Route 101	Upper Silver Creek	$	209,000	5/24/94
Slope protection near Yerba Buena bridge	Coyote Creek	$	34,500	11/1/88
	Subtotal	***$***	***1,222,500***	
Santa Clara County Traffic Authority				
Final design of bridge replacement	Coyote Creek	$	72,400	8/6/96
Santa Clara County Transit District				
Construction of concrete slope protection	Coyote Creek	$	100,000	11/28/95
City of San Jose and County of Santa Clara				
Joint use and development of the Penitencia Creek Park Chain	Penitencia Creek	$	200,000	1/7/87
	TOTAL	**$**	**2,553,700**	

SOUTH FLOOD CONTROL ZONE

PROJECT	FACILITY		DISTRICT COST	DATE
City of Gilroy				
Replacement of bridges across Lion Creek and installing a 30" RCP	Llagas Creek	$	1,051,600	1/12/88
County of Santa Clara				
Replacement of bridge at Bloomfield Ave.	Llagas Creek	$	1,500,000	12/23/86
Repairs to Burchell Road	Uvas Carnadero Creek	$	20,100	11/9/82
	Subtotal	***$***	***1,520,100***	
Santa Clara County Transportation Agency				
Replacement of bridge	Lower Llagas Creek	$	458,000	2/26/85
	TOTAL	**$**	**3,029,700**	

ADOPT A CREEK SUMMARY

as of September 1997

The District provides recognition, direction & technical assistance to the individuals, schools, businesses & community groups that adopt creeks.

NORTHWEST FLOOD CONTROL ZONE

ADOPTEE	CREEK	LOCATION	Approx Length (Ft)
Palo Alto Volunteers	Adobe Creek	El Camino to Bayshore	11,750
Palo Alto Volunteers	Barron Creek	El Camino to Bayshore	8,500
Hoover Elem.	Matadero Creek	Barron Ave	600
Warne Watson	Matadero Creek	El Camino to Bayshore	10,500
Linda Frost	Matadero Creek	Ross to Greer	2,100
Keys School	Matadero Creek	Greer Road and Highway 101	1,300
Mid-Peninsula High School	Matadero Creek	Ash Ave. to El Camino	800
Heritage Oaks Young Women	Permanente Diversion	Grant Road to Miramonte Ave.	2,500
Ann and Nicholas Cozzolino	Permanente Diversion	Katrina Way and Diericx Drive	1,100
Keystone Enterprises	Stevens Creek	Diericx Dr to Franklin Ave	1,300
U.S. Navy	Stevens Creek	Moffett Blvd. to Highway 101	1,100

Miles of Adopted Creek in Northwest Zone = 7.9

NORTH CENTRAL FLOOD CONTROL ZONE

ADOPTEE	CREEK	LOCATION	Approx Length (Ft)
Village School	Budd Ave Perc Ponds	San Tomas to Waldo	2,000
Lakewood Village	Calabazas Creek	Wildwood Ave to Tasman Dr	5,000
Wilcox High School	Calabazas Creek	El Camino to Monroe	5,500
S'vale Neighborhood Watch	El Camino Storm Drain	Lily to Reed	1,700
Nortel	San Toams Aquino	Mission College Boul. to Agnew Rd.	700
Westmont High	San Tomas Creek	Westmont to Silacci	1,800
Westmont High	San Tomas Creek	Westmont to Forest Hill Dr	1,000
St. Thomas of Canterbury Church Girl Scout Troop 212	San Tomas Creek	McCoy Ave to Forest Hill	3,700
Rachel Cote	San Tomas Creek	Westmont to Pollard	3,500
Boynton Neighborhood Assoc	San Tomas Creek	Payne to Williams	3,000
Westwood Open Classroom	Saratoga Creek	Pruneridge to Homestead	3,300
Wildwood Park	Saratoga Creek	Saratoga Parks & Rec. Comm	500
Cub Scout Pack 406	Saratoga Creek	Prospect to Hwy. 280	11,500
Cabrillo Middle School	Saratoga Creek	El Camino	-
Brookview Homeowners Assn.	Saratoga Creek	Prospect Road	-
Sutter School	Saratoga Creek	Homestead Road & Pruneridge Ave.	3,600
Balazes Analytical Lab	Sunnyvale East	Inverness to Dunholme	1,300
Los Gatos LEO's Club	Wildcat Creek	Riverdale Dr to Portos Dr	1,400

Miles of Adopted Creek in North Central Zone = 9.4

ADOPT A CREEK SUMMARY
as of September 1997

CENTRAL FLOOD CONTROL ZONE

ADOPTEE	CREEK	LOCATION	Approx Length (Ft)
Apostles Lutheran Preschool	Alamitos Creek	Almaden Expy & Harry Rd.	800
Alm. Hills Estates	Alamitos Creek	Winfield to Crossview	2,000
Woodside of Almaden HOA	Alamitos Creek	Conf. of Calero to McKean Rd	5,400
Graystone Elem	Alamitos Creek	Queenswood to Via Valiente	3,100
Almaden Country School	Alamitos Creek	Mt. Forest to Bubbling Well Place	1,700
Oak Grove Elementary School	Alamitos Creek	Camden Ave. to Greystone Ave.	7,100
SCC Horsemen's Assoc.	Calero Creek	Harry Rd. to 2500' U/S	2,500
Woodside of Almaden HOA	Calero Creek		4,500
Frost Elem	Canoas Creek	Blossom Hill to Calero Ave	2,950
Cub Scout Pack 578	Canoas Creek	Branham to Edelweiss	1,200
Santa Teresa High	Canoas Creek	Snell to Cottle	8,000
Rachel Carson School	Canoas Creek	Albion Drive and Edelweiss Drive	1,000
Hillbrook School	East Ross Creek	Shannon Rd. to Marchmont Dr.	1,700
Boy Scout Troop 286	Guadalupe River	Branham to Blossom Hill	5,400
Cub Scout Pack 286	Guadalupe River	Blossom Hill to Almaden	3,000
Scout Troop 262	Guadalupe River	Branham to Harvest Meadow	1,200
Silichip Chinook	Guadalupe River	Ironwood to Hillsdale	5,200
Western Waters Canoe Club	Guadalupe River	Montague Exp to Hwy 101	8,800
Gardner Teen Center	Guadalupe River	Willow St. to Virginia St.	2,200
Pioneer High	Guadalupe River	Almaden Expy to Meridian	3,500
Hewlet Packard	Guadalupe River	Hwy 101 to Trimble	2,600
Dames and Moore	Guadalupe River	237 to Montague Exp.	12,600
Christ the Good Shepard Luthern Church	Guadalupe River	Hedding St. to Empire St.	3,300
Willow Glen Educational Park	Los Gatos Creek	Campbell to Camden	6,500
CH2Mhill	Los Gatos Creek	Vasona Park to Camden	11,100
Blackford School	Los Gatos Creek	Bascom to Leigh	2,785
San Jose State	Los Gatos Creek	San Carlos to Santa Clara	3,200
Elec. Workers Local 332	Los Gatos Creek	Campbell to Bascom	4,700
South Bay Striders	Los Gatos Creek	Blossom Hill to Roberts Rd.	1,000
WGNA	Los Gatos Creek	Leigh to St Elizabeth	1,330
Christian Family Schools	Ross Creek	Hwy. 85 to L. G. Almaden	8,500

Miles of Adopted Creek in Central Zone = 24.4

ADOPT A CREEK SUMMARY
as of September 1997

EAST FLOOD CONTROL ZONE

ADOPTEE	CREEK	LOCATION	Approx Length (Ft)
Jain S. Koepke	Berryessa Creek	Piedmont Road to Messina Dr.	3,000
Empire Gardens	Coyote Creek	Jackson to Empire	1,000
Santa Teresa High	Coyote Creek	Fontonoso to Tennant	6,500
Cub Scouut Pack 252	Coyote Creek		1,800
Pearl Zanker Elementary	Lower Penitencia	Main to Elmwood Dwy	1,200
Neighbors	South Babb Creek	Along Squeri	2,000
AFSME Local 101	Thompson/Quimby	Aborn to Everdale and White Rd. to Thompson Ck.	2,500
Boy Scout Pack 166	Upper Penitencia	Noble Ave. to Rock Canyon Ave.	1,600
Piedmont Middle School	Upper Penitencia	Piedmont to Noble	2,800
		Miles of Adopted Creek in East Zone = 4.2	

SOUTH FLOOD CONTROL ZONE

ADOPTEE	CREEK	LOCATION	Approx Length (Ft)
Rogers Seed Co.	Llagas Creek	Gilman to Hwy 152	6,300
Gilroy High Sch.	Uvas Creek	@ Xmas Hill Park	2,500
Glen View School	Uvas Creek	Tenth to Thomas Rd.	3,800
Boy Scouts- Gavilan District	Uvas Carnadero Creek	Santa Teresa to Miller Ave.	5,600
		Miles of Adopted Creek South Zone = 3.4	

Total Miles of Adopted Creek in Santa Clara County as of Septemper 1997 = 49.3

APPENDIX H
ALLOCATED PROJECTS

SANTA CLARA VALLEY WATER DISTRICT
ALLOCATED PROJECTS
1997-98 BUDGET

PROJECT DESCRIPTION	ADOPTED BUDGET 1997-98	ADJUSTED BUDGET 1997-98 (7/15/97)	RATIONALE FOR ALLOCATION	NW ZONE	NC ZONE	CENTRAL ZONE	EAST ZONE	SOUTH ZONE	WATER UTILITY ENTERPRISE	OTHER
OPERATIONS				**Project Allocation Percentages**						
Benefit Assessment	$569,520	$569,520	Proportionate amount of Benefit Assessment levied in 1996-97 by each Flood Control Zone	23	12	31	25	9	—	—
Flood Insurance Liaison Study	$193,601	$193,601	Number of parcels in each Flood Control Zone	14	24	31	25	6	—	—
Contract Auditing Financial	$105,000	$105,000	Preceding year's actual expenditures & encumbrances of each fund	3.8	4.9	10.2	4.6	1.8	68.2	6.5
Basic Engineering	$264,596	$264,596	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Hydrologic Data Management	$1,130,718	$1,103,718	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
X-Valley Level and Benchmarking	$68,994	$68,994	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Emergency Operations	$375,293	$375,293	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Basic Hydrology	$721,845	$721,845	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Maintenance Warehousing Service	$1,380,730	$1,335,730	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Computerized Maintenance Management System	$618,918	$618,918	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Environmental Planning Support	$194,210	$194,210	Number of parcels in each Flood Control Zone and 50% to Water Utility Enterprise	7	12	15	12	4	50	—
Sandbag Public Assistance Program	$199,201	$199,201	Equal allocation to each Flood Control Zone	20	20	20	20	20	—	—
District Urban Runoff Program	$335,338	$335,338	Equal allocation to each North County Flood Control Zones and 50% to Water Utility Enterprise	12.5	12.5	12.5	12.5	—	50	—
TOTAL OPERATIONS	$6,157,964	$6,085,964								

***OTHER** category includes:
District Fund, Insurance and Equipment Maintenance

SANTA CLARA VALLEY WATER DISTRICT
ALLOCATED PROJECTS
1997-98 BUDGET

PROJECT DESCRIPTION	ADOPTED BUDGET 1997-98	ADJUSTED BUDGET 1997-98 (7/15/97)	RATIONALE FOR ALLOCATION	NW ZONE	NC ZONE	CENTRAL ZONE	EAST ZONE	SOUTH ZONE	WATER UTILITY ENTERPRISE	OTHER
OPERATING PROJECTS				**Project Allocation Percentages**						
Flood Awareness Education Program	$449,136	$449,136	Number of parcels in each Flood Control Zone	14	24	31	25	6	—	—
Comprehensive Flood Management Project	$649,137	$649,137	Equal allocation to each Flood Control Zone	20	20	20	20	20	—	—
Stream Resources Inventory & Management Project	$296,329	$296,329	Equal allocation to each Flood Control Zone and 50% to Water Utility Enterprise	10	10	10	10	10	50	—
Vegetation Management/Erosion Protection Program EIR	$1,275,369	$1,275,369	Equal allocation to each Flood Control Zone and 50% to Water Utility Enterprise	10	10	10	10	10	50	—
Red-Legged Frog Habitat Plan	$198,964	$198,964	Equal allocation to each Flood Control Zone and 50% to Water Utility Enterprise	10	10	10	10	10	50	—
Water Resource Integration/Coordination	$126,116	$126,116	Equal allocation to each Flood Control Zone and 75% to Water Utility Enterprise	5	5	5	5	5	75	—
Environmental Strategy	$746,072	$746,072	Equal allocation to each Flood Control Zone and 70% to Water Utility Enterprise	6	6	6	6	6	70	—
Solid Materials and Waste Management	$354,328	$354,328	Projected volume of waste generated by fund	9	24	11	17	5	34	—
Watershed Management Coordination Project	$165,331	$165,331	Equal allocation to each Flood Control Zone and 50% to Water Utility Enterprise	10	10	10	10	10	50	—
Regional Board Watershed Management Initiative	$286,562	$286,562	Equal allocation to each North County Flood Control Zone and 50% to Water Utility Enterprise	12.5	12.5	12.5	12.5	—	50	—
Stream Water Use Communication	$295,775	$295,775	Equal allocation to each Flood Control Zone and 75% to Water Utility Enterprise	5	5	5	5	5	75	—
Automated Mapping/GIS	$457,886	$457,886	Equal allocation to each Flood Control Zone and 50% to Water Utility Enterprise	10	10	10	10	10	50	—
TOTAL OPERATING PROJECTS	$5,301,005	$5,301,005								
TOTAL OPERATING EXPENDITURES	$11,458,969	$11,386,969								

***OTHER** category includes:
District Fund, Insurance and Equipment Maintenance

SUMMARY OF ALL ZONES COMMENTS AND RECOMMENDATIONS [1]
on the development of the
FUTURE FLOOD MANAGEMENT PROGRAM
received at the October 1997 meetings

1. All Zone Committees, except the Northwest Committee, suggested the need to consider seeking alternative revenues after year 2000.

2. Recommend charging fees to recover staff costs for review of project proposals, land use reviews, and permitting. This needs to be coordinated with cities before implementing.

3. Utilize available debt capacity ASAP (NW Zone).

4. Before seeking alternative revenues we need to:
   a. Develop baseline program showing need for continued funding.
   b. Show how existing reserves will be used.

5. Need a better estimate of projected future maintenance costs.

6. Consider enlisting support of cities to help apply pressure to work towards meaningful permit streamlining.

7. Consider a policy of not assuming anymore responsibilities in anticipation of revenue shortfalls (e.g., don't accept easements requiring additional maintenance expenditures).

8. Consider in the long-term plan, District acquisition of all the creek right-of-ways to better coordinate and manage the streams in conjunction with the other jurisdictions.

9. Recommend *increasing* public education efforts regarding:
   a. Responsibilities of private owners along creeks.
   b. District's use of herbicides and other chemicals.
   c. Adopt-A-Creek Program.

10. Consider increasing authority to enforce Ordinance 83-2.

11. Recommend coordinating efforts with cities to work on creek setback issue.

12. Would be helpful to know the results of the Flood Control Performance Audit before commenting on the future program.

13. Highest priority for maintenance should be given to flood protection before erosion repairs, graffiti removal, etc.

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[1] Comments specific to a particular zone are delineated by the zone name in parentheses after the comment.

14. Review project allocation formulas and how they were derived.

15. Recommend continuing work on programmatic Maintenance EIRs.

16. Recommend increasing flood insurance liaison efforts (Community Rating System) (East Zone).

17. Request cities be given opportunity for more input in making decisions on the District's maintenance program and future strategies.

18. Recommend evaluating property tax shift from the Water Utility to Flood Control.

19. Recommend an addition to the capital projects ranking criteria which provides for reconstruction of an improved channel which may no longer be considered adequate due to revision of FEMA standards (East Zone).

20. Recommend evaluating the cost-effectiveness of satellite maintenance yards in other areas of the County to minimize loss of productive time due to travel.

21. Recommend evaluating partnerships with cities, county, or other agencies to minimize duplication of maintenance activities (e.g., partnership with agency such as CALTRANS, whereby they maintain some of our roads while we maintain some of their drainage facilities).

NORTHWEST FLOOD CONTROL ADVISORY COMMITTEE

COMMENTS AND RECOMMENDATIONS
on the development of the
FUTURE FLOOD MANAGEMENT PROGRAM
received at the October 30, 1997 meeting

1. Is the Zone's existing additional debt capacity, for which the Board recently took action to make possible the sales of additional COPs, reflected in the projected revenues on the worksheet? (ans: no)

2. Concern that from the worksheet outlook, maintenance costs are increasing substantially.

3. Recommend evaluate possible permit fees to recover cost of permit reviews.

4. Does Proposition 218 impact the District's ability to issue additional debt?

5. Appears to be a discrepancy in the spreadsheet on the 97/98 CIP vs. what's in the balance sheet handout.

6. There's approximately $12 million in the capital reserve. How will the money be factored (how will the reserves be utilized) in the future program.

7. 2 Issues: 1. Operating projects
   2. Potential of adding $30 million (additional debt capacity)

8. Are we "required" to put reserves into the capital reserves or can we put them in the operating reserves?

9. Bond sales is a self funding mechanism for CIP.

10. How many projects is the District constructing by the year 2000 to maximize COPs ?

11. Committee is interested to know staff's recommendation for the baseline budget.

12. Determine mandatory vs. non-mandatory program costs for the Zone.

13. How does staff recommend utilizing the $12 M in reserves for the baseline?

14. Try to best use resources:
    - Begin recovering permit costs ASAP.
    - Move quickly on projects that can be funded by bond money (COPs).
    - Include projects that improve habitat as capital; e.g. Red-Legged Frog Habitat Plan (line item).
    - Use bond money whenever possible for studies & operating projects that will lead to CIPs.

15. What is the financial mechanism to pay the difference/shortfall if we want to maintain LOS?

16. We need to develop a baseline program before we can seek additional funding sources. This approach addresses the scenario if additional funding mechanisms fail.

17. Recommend considering a 2-step process whereby expenditures are reduced incrementally over 2-3 years (test the first cut for the 1st year, and then do further cuts as necessary).

18. It would be very difficult to justify requesting additional funding from the voters if we have $12 M in reserves.

19. Need a better estimate of the projected maintenance costs (instead of a low-high range).

20. Consider a policy of not accepting anymore responsibilities in anticipation of revenue shortfalls (i.e., don't accept anymore easements which will require maintenance expenditures).

21. Why are maintenance costs is so expensive after a capital project is constructed?

22. Recommend working to streamline the permit process if regulatory compliance is a significant contributor to increasing maintenance costs. Apply political pressure if necessary? Consider enlisting support of the cities to help apply pressure to work towards regulatory streamlining?

23. Environmental stewardship could be a big selling point (for future funding election)

24. Provide an example of a typical cost breakdown of a maintenance activity for cost comparison, and how each item increases due to environmental compliance.

25. Consider including in the long-term plan District acquisition of all the channels to better coordinate and manage the streams in conjunction with the other jurisdictions.

26. If we could design and build capital projects that are self sustaining (no maintenance requirements) they will be a big-selling point to the public.

27. Which capital projects are ready to begin construction?

28. Public education on the District's usage of, and safety of, herbicides and other chemicals used is needed.

30. The District needs to improve it's public image regarding the Matadero Creek issue by putting out more positive news about flood protection improvement at both creeks.

CENTRAL AND NORTH CENTRAL FLOOD CONTROL ZONE ADVISORY COMMITTEES

COMMENTS AND RECOMMENDATIONS
on the development of the
FUTURE FLOOD MANAGEMENT PROGRAM
received at the October 24, 1997 meeting

1. Add expenditures and project cost information to narrative description pages.

2. Differentiate between mandated vs. non-mandated program costs on worksheets.

3. Differentiate between in-house (staff) work vs. consultants/legal

4. Recommend giving priority to removing fish barriers on Calabazas Creek.

5. Recommend adding an objective/goal to acquire (easement or fee) all creek lands in county for maintenance and management.

6. Recommend maintaining or increasing education program, especially with owners who have easements or r/w on the creeks (stress individual responsibilities).

7. Consider increasing authority in enforcing ordnance 83-2.

8. Recommend coordinating efforts with cities to work on set-back issue.

9. Can District combine 5 zones into 1 zone after Benefit Assessment sunsets?

10. Would like to know the results of the performance audit before giving input on future program development.

11. Need to evaluate reductions in administration costs. Recommend consider 10% - 15% cut in Administration?

12. Inability to maintain constructed (improved) facilities is a significant issue which could result in returning areas to flood hazard zones (e.g., putting others back into floodplain).

13. Recommend that the Zone Committee focus on providing qualitative (higher level activity prioritization) input, rather than trying to review details in order to make program cuts.

14. Prioritize each activity by looking at the benefits each activity provides, e.g. how many residents do you protect? impact to community as a whole? traffic? etc.?

15. Providing flood protection is more important than erosion repairs, graffiti removal, etc.

16. Public education program is very important. Recommend that this priority remain high.

17. Recommend continue work on programmatic Maintenance EIRs

18. Recommend that staff prepare baseline budget recommendation for ZAC consideration.

19. Cashflow and expenditures spreadsheets should reflect zone cash reserves.

20. Recommend action to inform public on why the District does not use the reservoirs to provide flood protection.

- ADDITIONAL COMMENTS SUBMITTED:
  FROM: STAN BOGOSIAN

  Items to be considered:

  1. Increase budget for education (property owners, flood (Hey-Noah)
  2. Maintain LOS (level of service) for Emergency Operations
  3. Maintain LOS for Maintenance EIRs
  4. Erosion prevention:
     - Increase easement acquisitions
     - Increase removal of check dams/fish barriers (Wallace)
     - Increase enforcement of dumping laws (83-2)
  5. Administration
     - Realize efficiencies through in-house efforts
     - Do some staff reorganization, restructuring

CENTRAL AND NORTH CENTRAL FLOOD CONTROL ZONE ADVISORY COMMITTEES

ADDITIONAL COMMENTS AND RECOMMENDATIONS on the development of the FUTURE FLOOD MANAGEMENT PROGRAM received at the November 12, 1997 meeting

1. What can the Zone Advisory Committee (ZAC) do to help in getting the State to pay the subvention funds owed to the District? All avenues to obtain the $35-40 million the State owes the District should be pursued.

   There is a proposed bond issue being prepared for the June 1998 ballot which will capitalize on the attention El Nino is getting this year. State Senator Jim Costa is sponsoring this proposed bond issue.

2. Has the district explored alternatives to sediment removal and other standard maintenance practices? (i.e., maintenance-free channel designs: wider channel designs such that sediments do not need to be removed).

   Recommend studies to evaluate maintenance alternatives, including sediment source reduction, to reduce maintenance costs.

3. As the costs of routine maintenance continue to increase, we need to evaluate at what point it becomes cost-effective to revisit existing capital projects and make structural changes which will minimize or eliminate maintenance needs. Additionally, an evaluation needs to look into the impacts to the cities' facilities (i.e., outfalls) if some ongoing maintenance activities are discontinued.

4. Need to evaluate charging fees to agencies/entities in the watersheds that change land use activities resulting in increased maintenance costs.

5. Recommend evaluating alternatives to continuing funding to support maintaining the current program level of service beyond the year 2000-2001, including a capital improvement program.

6. Need to evaluate longterm program needs beyond 2002 (such as year 2020).

7. Suggestion was made to add stream restoration and habitat enhancement to Level of Service E, before moving program to Level of Service D with the looming revenue shortfalls.

EAST FLOOD CONTROL ZONE ADVISORY COMMITTEE

COMMENTS AND RECOMMENDATIONS
on the development of the
FUTURE FLOOD MANAGEMENT PROGRAM
received at the October 27, 1997 meeting

1. Why isn't Water Utility Enterprise paying for EOC (Emergency Operations Center)? Evaluate maintenance costs due to Water Utility operations.

2. Review project allocation factors and how they were derived.

3. Recommend charging permit fees for project/land use review to recover staff costs. Coordinate this with cities. Need to show improved service to developers and others in order to gain acceptance and support.

4. Show increased effort in the Flood Insurance Liaison Study (specifically CRS). Milpitas will transmit specific comments on this topic later.

5. Recommend initiating or reactivating sedimentation studies again since none has been funded for more than 10 years.

6. Staff to provide revised project cost allocation table for FY97-98 to Committee by next meeting (November 1997).

7. Request that the Cities be given the opportunity to be more involved in making decisions on the District's maintenance program and future strategies, especially for next year's activities.

8. Committee recognizes the District can't afford to fund the mitigation requirements for <u>all</u> the projected maintenance activities.

9. Recommend an individual with a forestry background (knowledge of upper watersheds) participate in the Watershed Management Initiative group.

10. Was there ever an estimate on how much each Zone Committee meeting cost (including staff time)?

11. Recommend analysis to differentiate costs between maintenance of improved facilities versus unimproved facilities.

12. Recommend District consider bond issuance.

13. Recommend evaluating property tax shift from the Water Utility to Flood Control, including analysis of how will it impact Water Utility (i.e., water rates).

14. Evaluate possible cooperative efforts with cities to maintain creek channels.

15. Mitigation for our maintenance is very critical

16. Evaluate cheaper ways to do maintenance

17. Adopt-A-Creek program should be kept at a high priority.

18. Referencing the capital projects priority ranking criteria: Recommend criteria be added which provides for reconstruction of an improved channel which may no longer be considered "adequate" due to revision of FEMA standards.

- SPECIFIC COMMENT FOR BOARD OF DIRECTORS' NOVEMBER 17 STRATEGIC PLANNING SESSION:

  Improve overall communication with Cities

- SPECIFIC COMMENTS PRIORITIZING FUTURE PROGRAM ACTIVITIES (PROVIDED BY TOM FLETCHER): These comments are in order of priority:

  a. Maintain improved channels.
  b. Maintain all channel capacity.
  c. Maintain facilities with highest b/c ratio (number of properties as protected as well as value)
  d. Continue Education Programs
  e. Audit program administration to identify overlapping responses/activities.
  f. Maintain mandated functions
  g. Promote Adopt-A-Creek program
  h. Facility rehabilitation, including upgrading to current standards (i.e., 100-year design).

SOUTH ZONE FLOOD CONTROL ADVISORY COMMITTEE

COMMENTS AND RECOMMENDATIONS
on the development of the
FUTURE FLOOD MANAGEMENT PROGRAM
received at the October 16, 1997 meeting

1. What staffing levels and how will streamlining of existing District administration will be evaluated? How will the efficiency of administration be increased?

2. What are the legally mandated costs (non-discretionary) for O&M of the Federal projects and any other mandated activities?

3. Recommend review of the costs of maintenance on the Llagas Creek revegetation/mitigation sites. The District should be able to "walk away" from maintaining these sites once they are established, thereby saving significant costs.

4. Recommend looking into streamlining maintenance operations in South County, i.e., evaluate a maintenance yard in South County to minimize loss of productive time due to travel (distance between North and South).

5. Recommend looking into partnering with cities, county, or other agencies (e.g., CALTRANS) to minimize duplication of maintenance activities. A possible example would be a partnership with an agency such as CALTRANS, whereby they would maintain some of our roads while we could maintain some of their drainage facilities.

6. Recommend recovering District costs for issuing permits/land use review. Evaluate Cities ability to cooperate in helping to collect fees. For cost-recovery purposes, consider separating land use review and permits for discharging in creeks.

7. Review projects allocation formulas for equity among zones.

8. Anticipate future costs for:
   - Nonpoint Source Programs (future Central Coast RWQCB requirements)
   - ESA (new species)

9. Coordinate support from cities to encourage legislature to meet the State's outstanding obligations and fund subventions.

10. What lessons have been learned from Llagas PL-566 project? If we knew it would take 10 - 20 years to do the project, how would we do the project differently? Possibly provide lower level interim flood protection (i.e., 25-year level of protection vs. 100-year protection) in critical areas.

11. Send all committee members notice regarding Llagas PL-566 status meeting. (tentatively first or second week of November)

12. Categorize South Zone overall costs in terms of engineering & administration.

13. Determine what is the minimum work and costs that the District must perform to meet its mandated obligations?

14. Recommend the District take a proactive approach that seeks to find ways to fund a preferred program.

15. Recommend the District contact Valley Transportation Agency as it is doing the same thing we are doing regarding funding needs in South County.

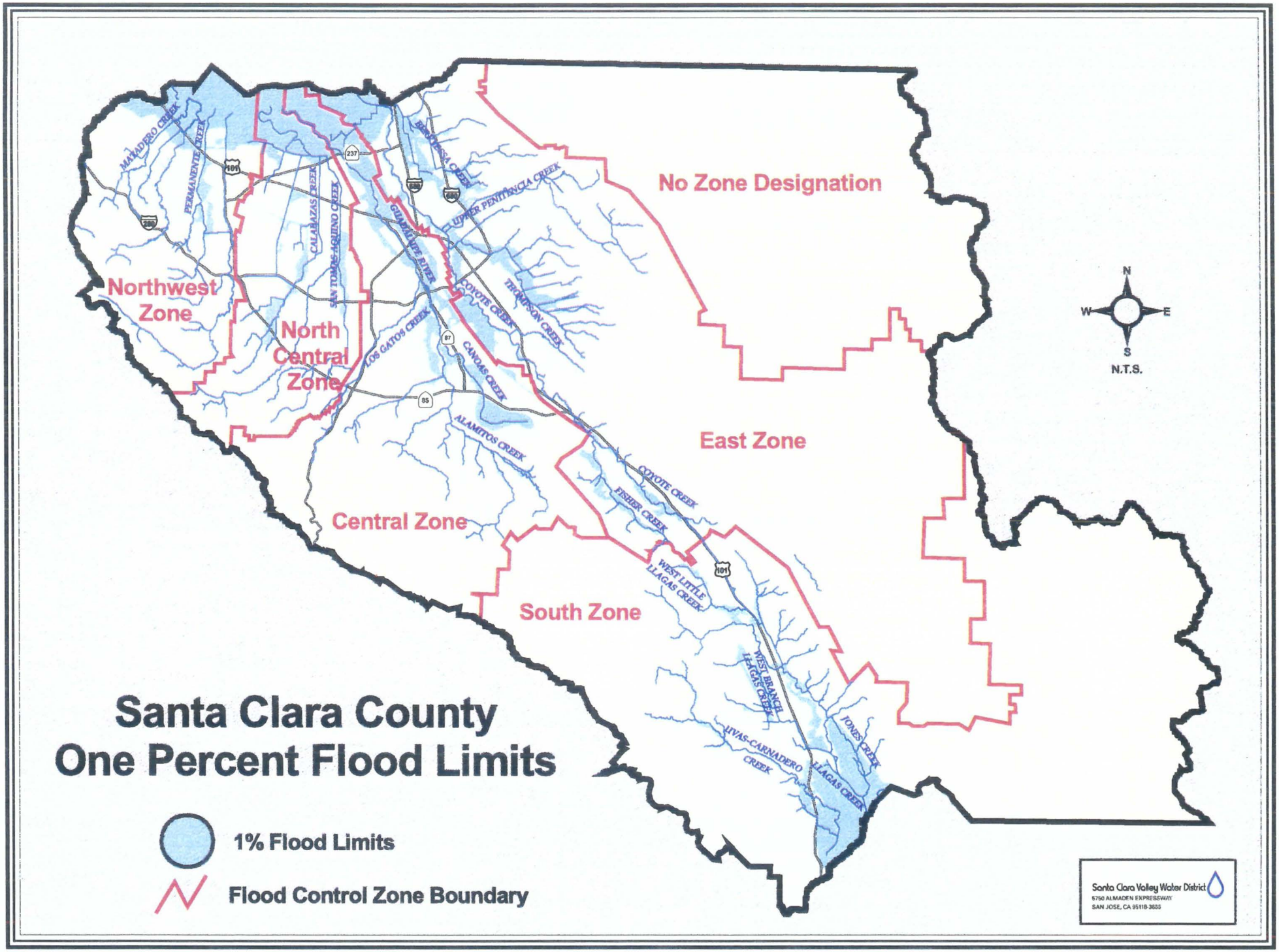
16. What happens if we do not perform the minimum work identified in #13?

17. Use PL-566 to help meet (and illustrate) the growing desire of community for recreation and environmental amenities.

18. Developers would prefer partnering with local agencies to construct flood control improvements in creeks rather than spending money on retention/detention ponds. Retention/detention ponds require establishing associations or other mechanisms to ensure long-term O&M of the ponds.

19. Recommend the District send a representative to the regular meetings of the South County Joint Planning Advisory Council (South County Planning/Exchange).

APPENDIX J
MAPS



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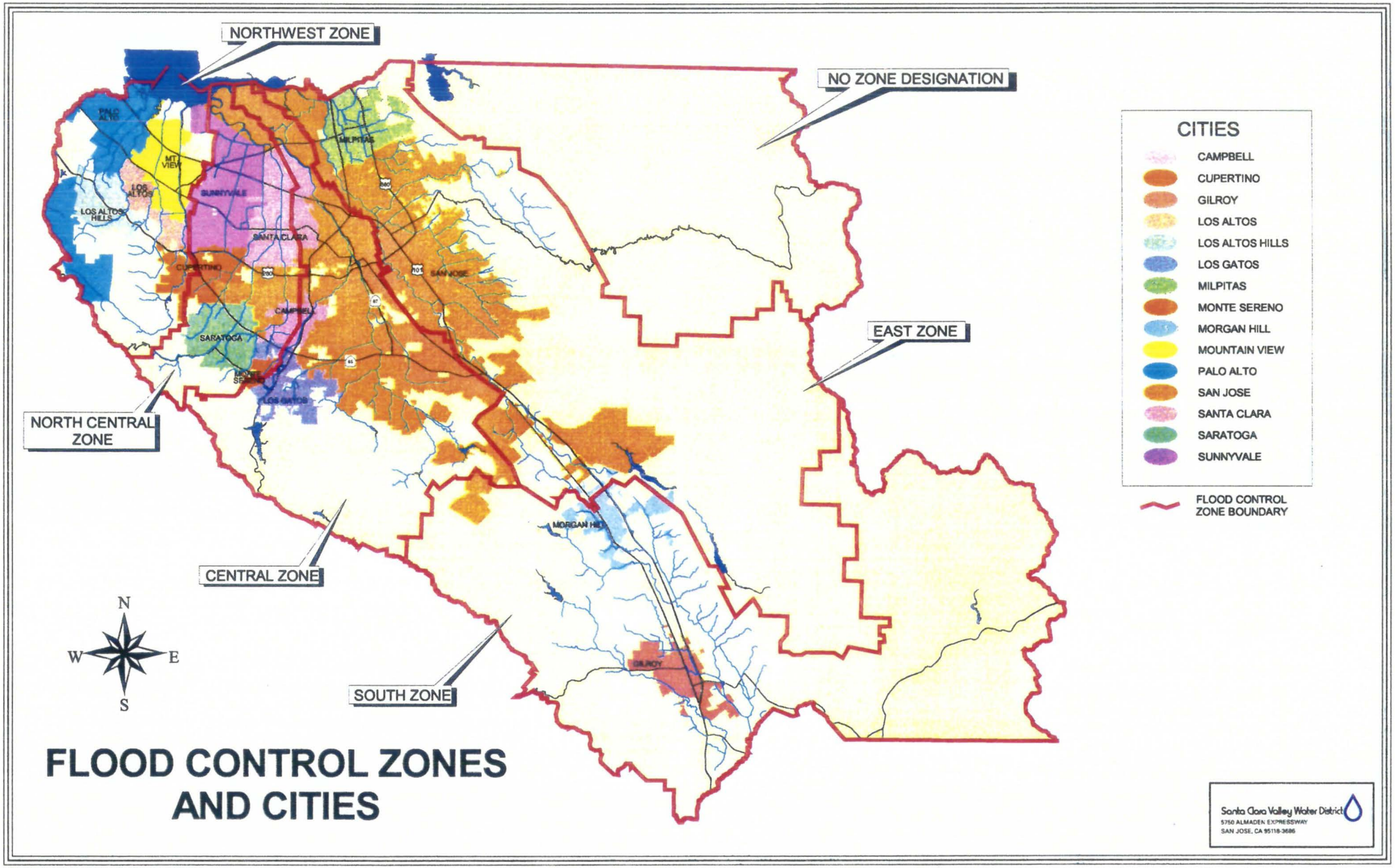

FLOOD CONTROL ZONES AND CITIES

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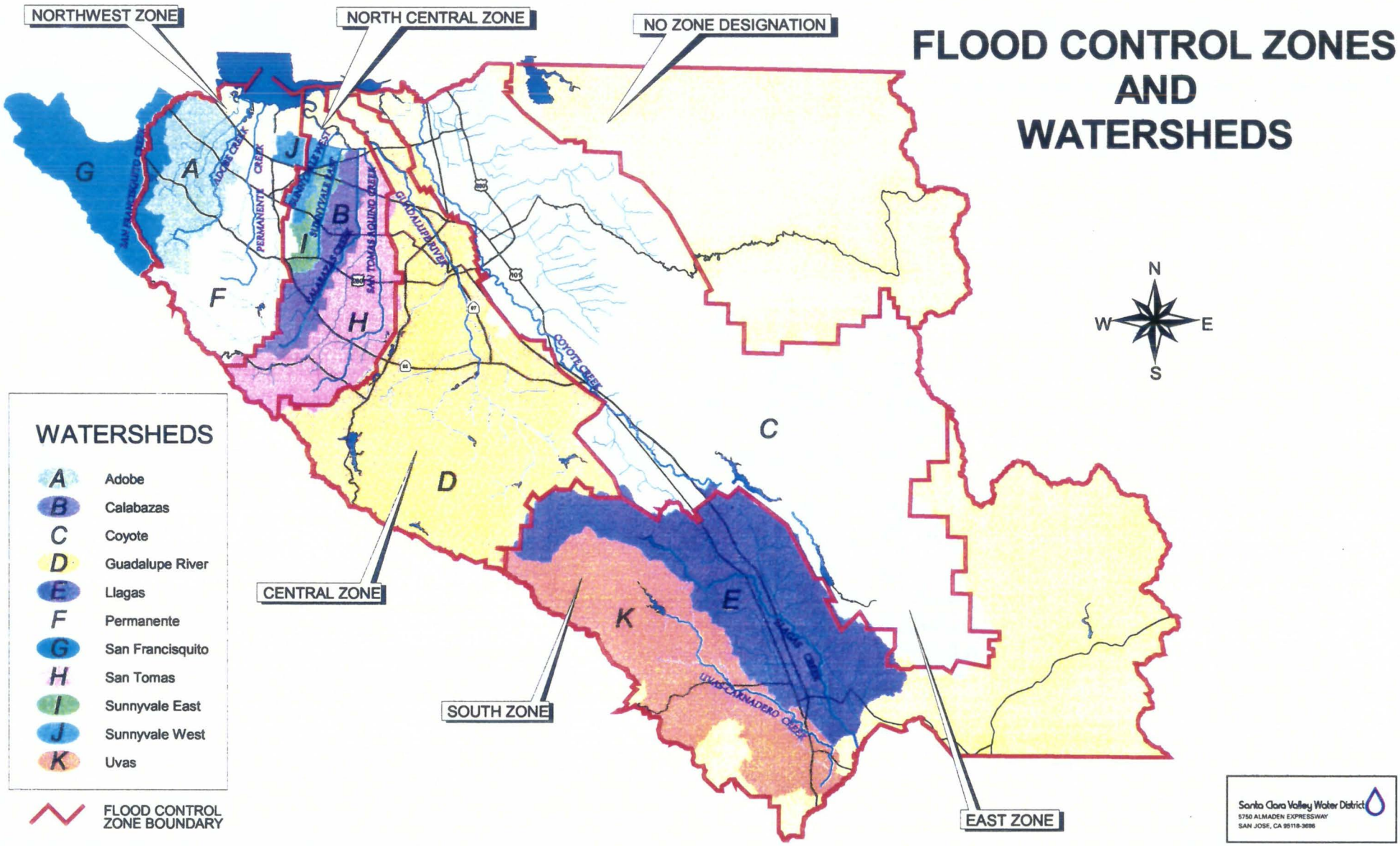
FLOOD CONTROL ZONES AND WATERSHEDS



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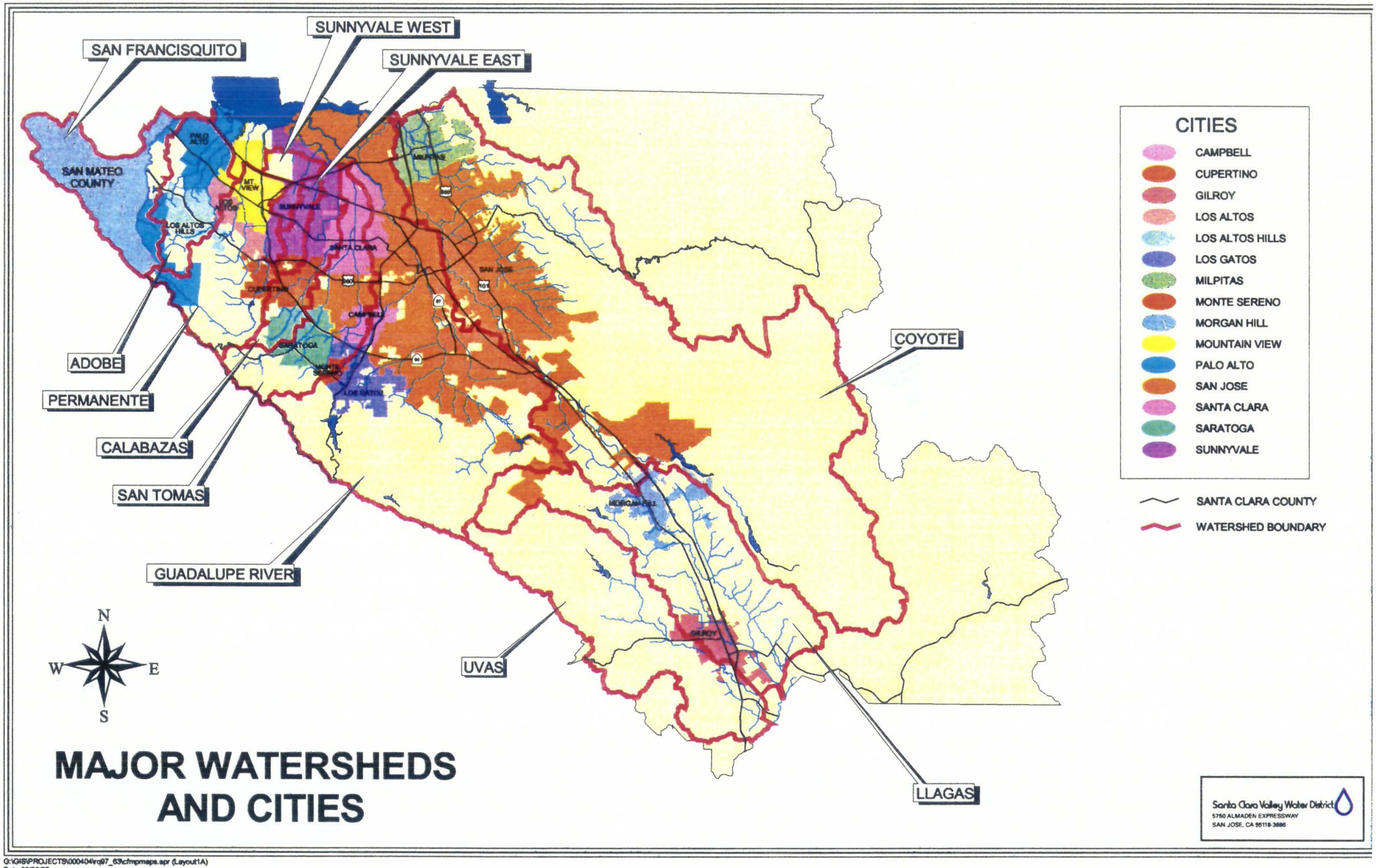

MAJOR WATERSHEDS AND CITIES

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About half of the needed 1% flood protection projects have been completed

Areas subject to 1% flood

SUMMARY

Risk exposure:
700 miles of rivers; 12 miles of bay shoreline

SCVWD total construction costs:
- $139.4 M - projects since 1982
- $215.6 M - current/future projects

Protection:
Existing and future projects together protect more than 15,100 homes.

PROJECTS COMPLETED SINCE 1982

** Dollars listed for "Potential 1 percent flood damage" and "Homes protected" add together all phases of a project, including phases under study.*

1. **Matadero Creek** (Phases I - IV of seven phases)
   Location: Highway 101 to Barron Creek
   Construction cost: $21.9 M
   Potential 1 percent flood damage: $18 M
   Homes protected (all phases): 4,100

2. **Barron Creek**
   Location: Highway 101 to Louis Road
   Construction cost: $900,000
   Potential 1 percent flood damage: $14.5 M
   Homes protected (all phases): 1,400

3. **Barron Creek**
   Location: Louis Road to Foothill Expressway
   Construction cost: included in Matadero V
   Potential 1 percent flood damage: $14.5 M
   Homes protected (all phases): 1,400

4. **Adobe Creek**
   Location: Highway 101 to El Camino Real
   Construction cost: $10.5 M
   Potential 1 percent flood damage: $21 M
   Homes protected: 1,600

5. **Stevens Creek**
   Location: San Francisco Bay to Homestead
   Construction cost: $4.1 M
   Potential 1 percent flood damage: N/A
   Homes protected: N/A

6. **Saratoga Creek**
   Location: San Tomas Aquino Crk. to Pruneridge Ave.
   Construction cost: $5.5 M
   Potential 1 percent flood damage: $40.5 M
   Homes protected: 3,800

7. **San Tomas Aquino Creek**
   Location: Highway 101 to Saratoga Creek
   Construction cost: $2.7 M
   Potential 1 percent flood damage: $3.0 M
   Homes protected: N/A

8. **Guadalupe River**
   Location: Alviso Marina to Highway 101
   Construction cost: $5.6 M
   Potential 1 percent flood damage: $61M
   Homes protected: 6,000

9. **Guadalupe River**
   Location: I-880 to Coleman Avenue
   Construction cost: $66 M
   Potential 1 percent flood damage: $520 M *
   Homes protected: 4,300 *

10. **Coyote Creek**
    Location: San Francisco Bay to Highway 237
    Construction cost: $19.1 M
    Potential 1 percent flood damage: $52 M *
    Homes protected: 1,600 *

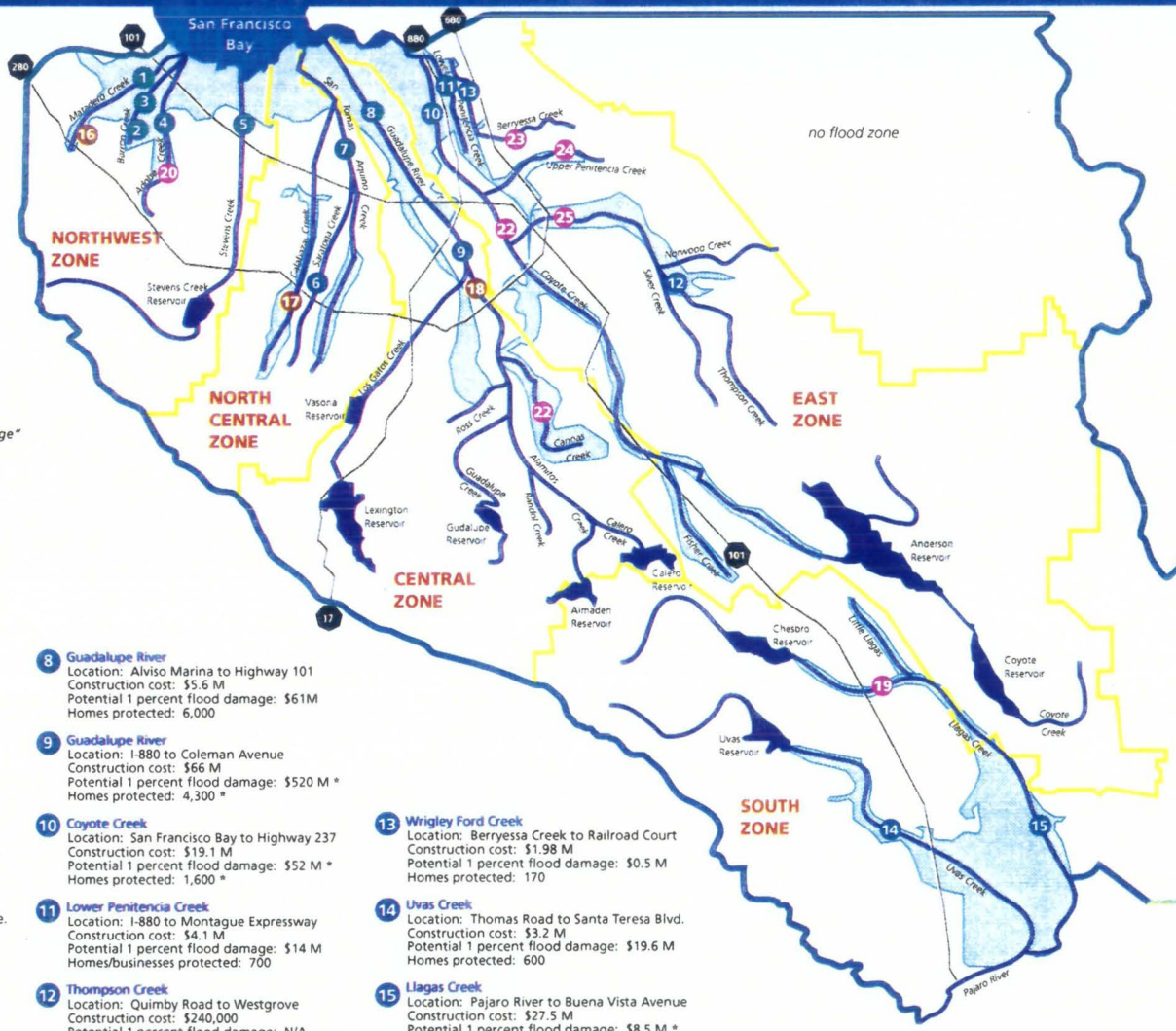
11. **Lower Penitencia Creek**
    Location: I-880 to Montague Expressway
    Construction cost: $4.1 M
    Potential 1 percent flood damage: $14 M
    Homes/businesses protected: 700

12. **Thompson Creek**
    Location: Quimby Road to Westgrove
    Construction cost: $240,000
    Potential 1 percent flood damage: N/A
    Homes protected: N/A

13. **Wrigley Ford Creek**
    Location: Berryessa Creek to Railroad Court
    Construction cost: $1.98 M
    Potential 1 percent flood damage: $0.5 M
    Homes protected: 170

14. **Uvas Creek**
    Location: Thomas Road to Santa Teresa Blvd.
    Construction cost: $3.2 M
    Potential 1 percent flood damage: $19.6 M
    Homes protected: 600

15. **Llagas Creek**
    Location: Pajaro River to Buena Vista Avenue
    Construction cost: $27.5 M
    Potential 1 percent flood damage: $8.5 M *
    Homes protected: 1,100 *



UNDER CONSTRUCTION OR FUTURE CONSTRUCTION

16. **Matadero Creek (Phase VI and VII)**
    Location: Bol Park to Foothill Expressway
    Construction cost: $2.0 M
    Potential 1 percent flood damage: $18M *
    Homes protected: 4,100*

17. **Calabazas Creek**
    Location: Guadalupe Slough to Homestead Road
    Construction cost: $7.1 M
    Potential 1 percent flood damage: $18 M *
    Homes protected : 2,450 *

18. **Guadalupe River**
    Location: Coleman Avenue to I-280
    Construction cost: $41.0 M
    Potential 1 percent flood damage: $520 M *
    Homes protected: 4,300 *

PROJECTS UNDER STUDY

Some construction costs and potential damages not yet known

19. **Llagas Creek**
    Location: Buena Vista Avenue to Wright Avenue
    Construction cost: $23 M
    Potential 1 percent flood damage: $8.5 M
    Home protected: 1,100

20. **Adobe Creek**
    Location: El Camino Real to Moody Road
    Construction cost: $8.1 M
    Potential 1 percent flood damage: $2.7 M
    Homes protected: 220

21. **Guadalupe River**
    Location: I-280 to Blossom Hill Road
    Construction cost: $114.1 M
    Potential 1 percent flood damage: $280 M
    Homes protected: 7,400

22. **Coyote Creek**
    Location: Montague Expwy to Santa Clara St.
    Potential 1 percent flood damage: $28 M
    Homes protected: N/A

23. **Berryessa Creek**
    Location: Calaveras Blvd. to Old Piedmont Road
    Potential 1 percent flood damage: $53 M
    Homes protected: 1,181

24. **Upper Penitencia Creek**
    Location: Coyote Creek to Dorel Drive
    Potential 1 percent flood damage: $48 M
    Homes protected: 4,200

25. **Lower Silver Creek**
    Location: Coyote Creek to Cunningham Avenue
    Construction cost: $20.3 M
    Potential 1 percent flood damage: $31.6 M
    Homes protected: 1,400

NOTE–PLACEMENT OF MAP FEATURES ARE APPROXIMATIONS AND ARE NOT EXACTLY TO SCALE. A DETAILED MAP OF FLOOD ZONES IS AVAILABLE.

Updated 3/30/97